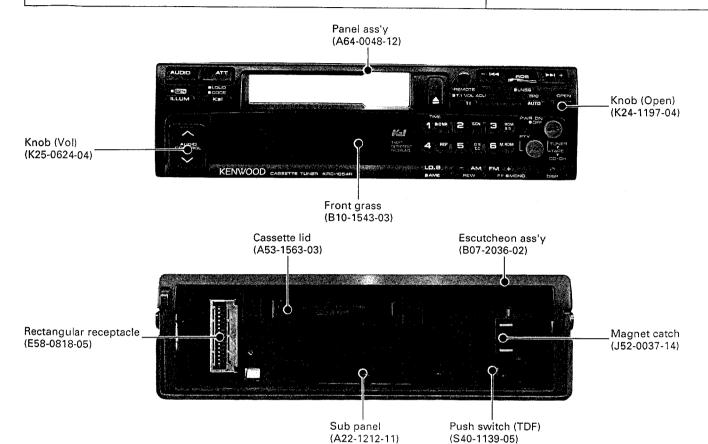
RDS EON CD-CH CONTROL CASSETTE TUNER

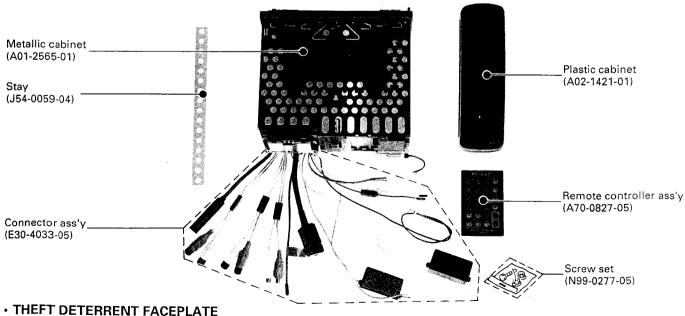
# KRC-1054R

# SERVICE MANUAL

KENWOOD

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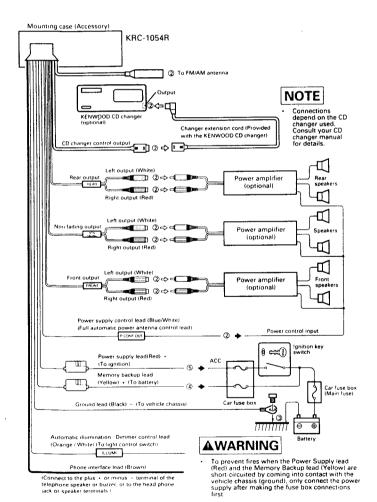
Model name: TDF-1054R
(Not supplied as service parts.)

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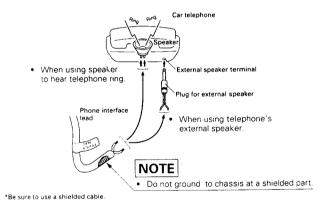
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### **CONNECTIONS**

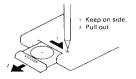


#### **■** Example of telephone interface connection



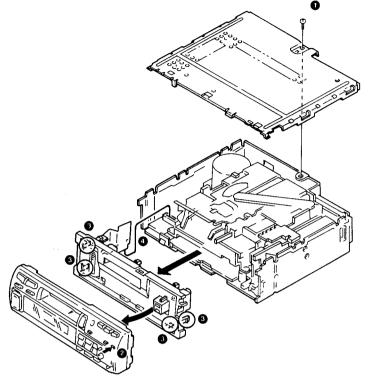
## Replacing battery of remote control unit

- The battery life is approximately a half year. When the life has expired, plaese replace the battery with a new battery.
- The remote control unit uses a lithium battery (CR2025).
- Insert battery following the illustration inside the battery box, taking care not to reverse the + and - polarity.

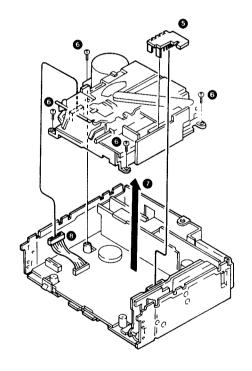


## **DISASSEMBLY FOR REPAIR**

- 1. Remove the screw (1) and remove the top panel.
- 2. While pressing and holding the OPEN button (2), remove the control unit.
- 3. Remove the sub panel by pushing the 4 claws (3) open, and remove the flexible wire (4).

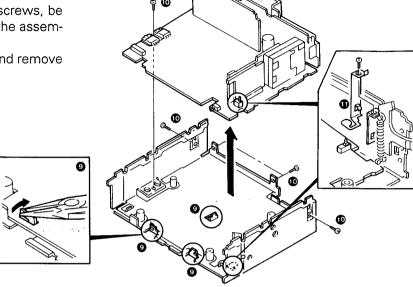


- 1. Unplug the board connector ( **6** ).
- 2. Remove the 4 screws (**6**), move the cassette mechanism upward to make a space below it (**7**), and unplug the connector (**8**).

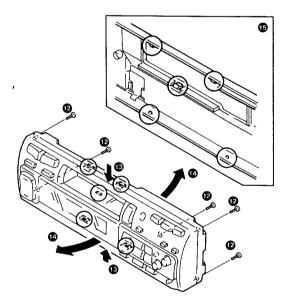


## **DISASSEMBLY FOR REPAIR**

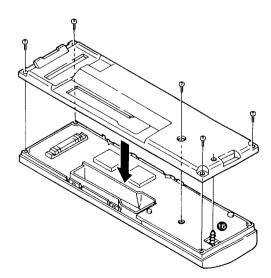
- 1. Straighten the 3 claws ( **9** ) on the chassis using a pair of pliers, etc.
- 2. Remove the 5 screws ( ①). As the screw marked ( ①) \* is of a different type from other screws, be careful to use it in the same position at the assembly.
- 3. Remove the lever and the screw ( 10 ), and remove the board unit.



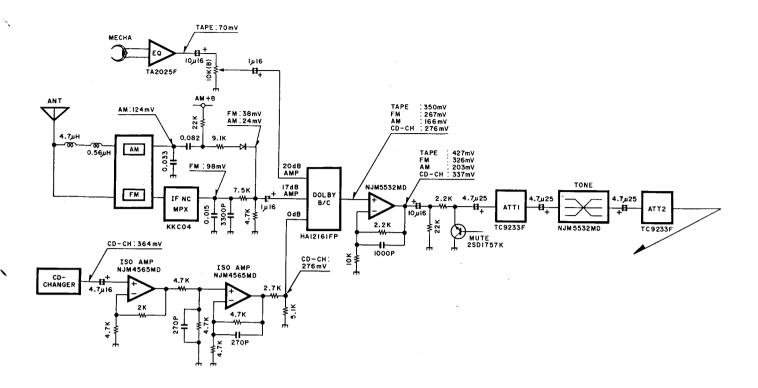
- 1. Remove the 5 screws (12).
- 2. While pushing the upper and lower sections (18) of the front case, open the lower section (12).
  - \*Be save to engage the 5 claws ( 15 ) securely.

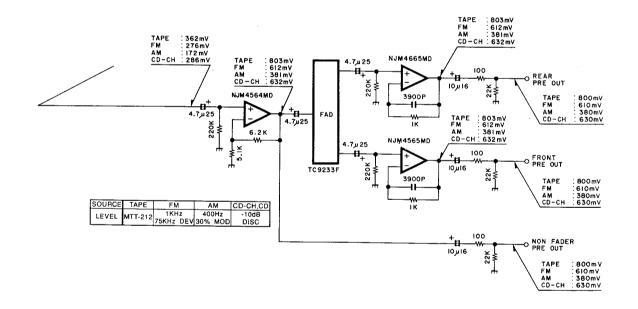


1. When assembling the rear case, fit the spring ( ) into the hole on the case and attach the 5 screws.



## **BLOCK DIAGRAM**





KRC-1054R

## **CIRCUIT DESCRIPTION**

## 1. Description of Component

## 1-1. Audio Unit (X09-5042-70)

Ref No.	Semi. name	Use and function	Operation
IC1	TA2025F	Tape EQ amp	Playback equalize, head amplifier.
IC2	HA12161FP	Dolby B.C	Dolby B/C type decoder, source switching.
IC3, 4	NJM4565MD	CD-CH isolation amp	Input buffer for IC4. Isolation amplifier.
IC11	TC9233FK	E-VOL	Sound volume, loudness, tone control, fader balance, attenuator.
IC12	NJM5532MD	Buff amp	VOL2 input buffer amplifier.
		Tone	Tone control and preamplifier (for center channel).
IC17, 18	NJM4565MD	Pre amp	IC17: Rear preamplifier. IC18: Front preamplifier.
Q1, 2	2SD1757K	EQ mute	Muting of EQ amplifier output.
Q11, 12	2SD1757K	Mute	

## 1-2. Synthesizer Unit (X14-5002-70)

Ref No.	Semi. name	Use and function	Operation
IC1	LC7218M	PLL IC	PLL for FM/AM tuner.
IC2	TC4W66F	Analog IC	Switches LPF time constant during FM seek.
IC3	NJM5532MD	Buff	Buffer between Dolby IC and E. Volume IC.
IC4	NJM4565MD	T.ADV amp	
IC5	SAA6579T	RDS Demodulator IC	
IC6	LC6543H-4600	RDS sync μ-COM	
IC7		Code/security data memory	
IC8	TA7291P	Sub-motor drive IC	
IC9	LC3564QM-10	S-RAM	RAM for RDS data such as AF list.
IC10	TC74HC573AF	Latch	Latch between IC9 and IC16.
IC11	M5237ML	3-terminal-IC	For 8 V AVR.
IC12	PST572HMT	Reset IC	Lo when the main unit is detached.
IC15	SN74HC367ANS	Inverter	For CD-CH data.
IC16	M38067M8D094FP	Master μ-COM	
IC17	75004GB-864-3B4	Mechanism μ-COM	
IC51	KKC04	IF/NC/MPX	IF/NC/MPX for K2I.
IC52	TA75S393F	Comparator	During K2I operation, switches the adjacent interference detection sensitivity by detecting over-modulation.
Q1	2SC2412K	BU detect	
Q2	2SC2412K	Acc detect	
Q3, 4	2SC2413K	IF amp	Q3: IF amplifier for Wide. Q4: IF amplifier for Narrow.
Q5	XDA124EK	LW/MW SW	
Q6	XDC124EK	Lo/Dx SW	
Q7	DTA144EK	7.7	
Q8	2SA1428	FM+B SW	
Q9	2SA1428	AM+B SW	
Q10	2SK536	Vt LPF	For AM.
Q12	XDC144EK	IC 2 control	
Q13	2SA1037K		
Q14	2SK536	FM Vt LPF	
Q15	2SC2412K	CRSC SW	
Q16	2SC2412K	CRSC drive	
Q17	2SC2412K	S-meter buff	
Q18	2SA1037K	S-meter drive	
Q19	2SC2412K	AM SD SW	
Q20	XDC144EK	FM mute SW	
Q21	DTA144EK	Narrow SW	In test mode.
Q22	XDC144EK	K2I/wide SW	
Q23	XDC144EK	T.ADV circuit gain SW	Switches the gain for playback and fast winding.
Q24	XDC144EK	T.ADV circuit time constant SW	Switches the time constant for playback and fast winding.

# **CIRCUIT DESCRIPTION**

Ref No.	Semi. name	Use and function	Operation
Q25	XDA124EK	EQ mute inverter	
Q26	2SC2412K	T.ADV circuit inverter	
Q27	DTC144EK	MONO/ST SW	
Q28	DTB123YK	+B SW for sync μ-COM	
Q29	2SC2412K	AVR SW for sub motor	For IC8.
Q30	2SA1408 (O)	AVR drive for sub motor	For IC8.
Q31	XDC124EK	KICK SW	For IC8.
Q32	XDC124EK	S-RAM CE1 control	Inhibits read from or write to S-RAM while power is OFF.
Q33	2SB1370F8	8V AVR SW	Audio circuitry.
Q34	DTA114EK	8V AVR drive	Audio circuitry.
Q35	2SB1370F8	ILLUM AVR SW	
Ω36	2SC2412K	ILLUM AVR drive	
Q37	DTA114EK	ILLUM AVR control	
Q38	DTC144EK	ILLUM AVR control	
Q39	2SB1370F8	5V AVR SW	Logic circuitry of μ-COM, etc.
Q40	2SC2412K	5V AVR control	Logic circuitry of μ-COM, etc.
Q41	DTB123YK	Power on 5V SW	
Q42	XDC144EK	Power on 5V drive	For the moment the power is switched ON.
Q43	2SA1036K	Remove 5V SW	
Q44	2SC2412K	Remove 5V drive	
Q45~47	2SA1037K	E.VOL. data shifter	
Q51	XDC144EK	Small in inverter	
Q52, 54	XDA124EK	TA/RA/CH SW	
Q53, 55	XDA124EK	□□off/B/C SW	
Q56	XDC124EK	PWR on 5V SW	Controls IC15.
Q57	XDC144EK	DSI indicator INH.	Inhibits DSI indicator while the panel is attached.
Q58	2SC2412K	DSI indicator SW	This die parier le ditaoned.
Q59	2SA1037K	Mute drive	
Q60	XDC124EK	Mute drive	
Q61	XDA124EK	Mute drive	
Q62	2SA1428	Motor +B SW	
Q63	DTC114EK	Motor +B drive	
Q64, 65	2SC2412K	Reel pulse buff	
Q66	2SA1428	Amver +B SW	
Q67	2SA1428	Green +B SW	
Ω68	DTD123YK	Dimmer SW	
Q69	DTD123YK	Green dimmer SW	For the case in which SMALL is input.
Q70	XDC144EK	Amver +B drive	12.0 11900
Q71	XDC144EK	Green +B drive	
Q72	DTA144EK	Green dimmer drive	
Q73	2SC2411K	PAN 5V SW	For the case in which the panel is attached.
Q74	DTA144EK	PAN 5V drive	For the case in which the panel is attached.
Q75	XDC124EK	PAN 5V control	For the case in which the panel is attached.
Q76	DTA144EK	Manual reset SW	and the partier to attached,
Q77	XDC144EK	Manual reset SW	
Ω78	XDC124EK	Current detect reset SW	
Q79	2SC2412K	EX. reset SW	
Q80	2SC2411K	LCD lamp SW	
Q502	DTA144EK	AFC SW	
Ω503	2SC2412K	AFC SW	
Q505	2SC2412K	CRSC SW	

## **CIRCUIT DESCRIPTION**

## 1-3. Switch Unit (X25-7042-70)

Ref No.	Semi. name	Use and function	Operation
IC1	75004GB-863-3B4	Panel μ-COM	Control of display, keys and remote control, communications with Master μ-COM.
IC2	PST572DMT	Reset IC	Resets Panel μ-COM.
IC3	RS-21	Remote control sensor	
IC4, 5	LC7582E	LCD driver	
Q1	DTA143XK	INH driver	Drives the LCD driver INH signal and remote control sensor power.
Q2	DTC144EK	INH driver SW	The state of the s
	XDC144EK		

## 1-4. Daughter Unit (X89-2002-70)

Ref No.	Semi. name	Use and function	Operation
IC1, 2	NJM4565D	EX-mute buff	
IC3	TA79L005P	3-terminal regulator	Negative output (-5 V).
IC4	TA78L005AP	3-terminal regulator	Positive output (+5 V).
Q1	DTA124EK	P.CON out driver	Drive and protection of P.CON.
Q2	2SA1037K	P.CON out driver	Drive and protection of P.CON.
Q3	2SB1277	P.CON out driver	Drive and protection of P.CON.
Q4	DTC114EK	P.CON driver SW	
Q5, 7	2SD1266BD	CK-50 driver	
Ω6, 8	2SC2412K	CK-50 driver	
Ω9	2SC2412K	EX.mute driver SW	

## 2. KENWOOD INTELLIGENT 2 IF (K2I)

#### 2-1. K2l IF band switch

To take proper operation according to the radio wave condition of each country, the K2I performs automatic switching of IF band by setting the IF filter bandwidth to Wide or Narrow based on the information from three detector circuits.

The three detector circuits refer to:

- 1. 100 kHz beat detector (100 kHz adjacent interference detection)
- 2. Deviation detector (Overmodulation detection)
- 3. Weak strength detector (Field strength detection)

By setting the IF bandwidth automatically according to the logic rule, a high-sensitivity with low noise and optimum state in any country is implemented.

## 2-2. Newly developed narrow-band IF filter

The previously used IF filter could not eliminate the adjacent interference within 100 kHz completely.

The newly developed IF filter has a very narrow bandwidth characteristic compared to the previous filter, and also allows to obtain stable tuning frequency and selectivity characteristics.

To make low distortion and high separation possible even with the narrow-band filter, new circuitry is used together with it.

### 2-3. Description of Data of K2I

### 2 signal selectivity

While the selectivity within + 100 kHz with the previous ceramic filter was only about 2 dB, A selectivity of 15 to 20 dB can be achieved by using the newly developed narrow-band ceramic filter on the Narrow side. (fig. 1)

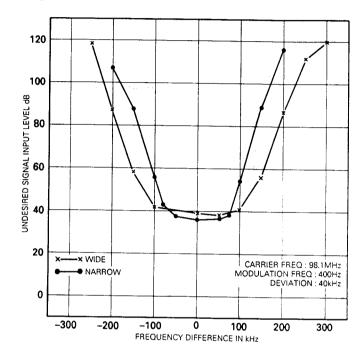


fig. 1 Notice the high selectivity (in Narrow mode) within + 100 kHz.

## **CIRCUIT DESCRIPTION**

## 3. Programme Type Codes

The PTY mode allows to search the programme type the user desired based on the broadcast content data transmitted by each network. This table shows the data on the programme types. However, at present, many radio stations do not handle this service and the areas where this function is available and the pro-

gramme types are limited.

Data in the last column of the table, No. 31 (Alarm) is transmitted with emergency broadcast. This programme type cannot be selected as one of the PTY programme types.

3-1

Code	Program type	English	Francais	Deutsch	
1	News	NEWS	INFOS	NEWS	
2	Current Affairs	AFFAIRS	MAGAZINE	POLITIK	s
3	Information	INFO	SERVICES	SPEZWORD	P
4	Sport	SPORT	SPORT	SPORT	E
5	Education	EDUCATE	EDUCATIF	LERNEN	E
6	Drama	DRAMA	FICTION	HOER+LIT	С
7	Culture	CULTURE	CULTURE	KULTUR	н
8	Science	SCIENCE	SCIENCES	WISSEN	
9	Varied	VARIED	DIVERS	UNTEAR	
10	Pop Music	POP M	M POP	POP	
11	Rock Music	ROCK M	M ROCK	ROCK	М
12	M. O. R Music	M. O. R M	M VARIEE	U-MUSIC	U
13	Light Classical	LIGHT M	M CL LEG	L-KLASS	S
14	Serious Classical	CLASSICS	M CL SER	E-KLASS	1
15	Other Music	OTHER M	AUTRE M	SPEZ MUS	С
31	Alarm	ALARM	ALERTE	ALARM	

# 3-2. Definition of the terms used to denote Programme Type

## a. Speech-based categories

1. News

Short accounts of facts, events and publicly expressed views, reportage and actuality.

2. Current affairs

Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including documentary debate, or analysis.

3. Information

Programme whose purpose is to impart advice in the widest sense, including meteorological reports and forecasts, consumer affairs, medical help, etc.

4. Sport

Programme concerned with any aspect of sport.

5. Education

Programme intended primarily to educate, of which the formal element is fundamental.

6. Drama

All radio plays and serials.

7. Culture

Programmes concerned with any aspect of national or regional culture, including religious affairs, philosophy, social science, languadge, theatre, etc.

8. Science

Programmes about the natural sciences and technology.

9. Varied

Used for mainly speech-based programmes usually of light-entertaiment nature, not covered by above categories. Examples are: quizzes, panel games, personality interviews, comedy and satire.

#### b. Music based categories

10. Pop

Commercial music, which would generally be considered to be of current poplar appeal, often featuring in current or recent record sales charts.

11. Rock

Contemporary modern music, usually written and performed by young musicians.

12. M.O.R.

(Middle of the Road Music). Common term to describe music considered to be "easy-listening", as opposed to Pop, Rock or Classical. Music in this category is often but not always, vocal, and usually of short duration (<5min.).

13. Light classics

Classical Musical for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.

14. Serious classics

Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.

15. Other music

Musical styles not fitting into any of the above categories. Particularly used for specialist music, of which Jazz, Rhythm & Blues, Folk, Country, and Reggae are examples.

#### c. Other

16~30. Not yet assigned.

31. Alarm

Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.

Note: These definitions can slightly differ between various language versions.

## CIRCUIT DESCRIPTION

### 3-3. Operation method

- The PTY mode is initiated at press of the PROG key. (The PTY mode is canceled at the next press of the PROG key).
- 2. The language can be displayed by holding the CLK key depressed for 1 second.
  - Languages of three countries (English, French, German) can be recalled at press of preset keys 1 to 3. The selected language can be established at press of the CLK key. After this, go to step 3) below.
- 3. Programme type selection: keys 1 to 6, FM key, AM key.
- 4. PTY search starts at press of **⋈**/▶.
- A station with the selected programme type is tuned (The PTY mode is cancelled in 10 seconds after tuning).

(Within 10 seconds)

- PTY search restarts at press of ◄</▶</li>
   (In case a station with the selected programme type cannot be searched)
- 7. The seek operation ends after one cycle (the PTY mode is cancelled).

## 3-4. Display in PTY mode

- 1. "NEWS" Last programme type display. PTY dots ON.
- 2. "ENGLISH" Last language display. PTY dots ON.
- 4, 6. "NEWS" Programme type display.
  PTY dots ON.
- 5. "BBC KENT" Tuned station PS display. PTY dots blinking.
- 7. "NO PTY" (2 seconds) PTY dots OFF.

#### 3-5. EON search method

When there are stations with the selected programme type is found in the stored EON data, they are searched in the order they are stored in the SRAM. If the **M/>>** key is pressed again within 10 seconds after tuning a station with the selected programme type, the next network is searched. After searching based on the EON data has completed, the PTY seek operation occurs.

- The PI code of the last channel is not searched even when it exists in the data.
- After the seek operation is started, the PI code is confirmed unconditionally every time SD is detected (including stations tuned in EON search).
- •The language can be selected from English, French and German.

#### 3-6. Modification of TI Search function in '93 model

•Auto TI search is not executed with the TUNER source.

But, the TI dots blink at the timing of search. (It is executed like before with other sources.)

Reason: To prevent TI search from occurring in case the station tuned by search in the PTY mode is not a TP station.

# 3-7. Modification of specifications of SDK model with timer function in '93 model

 Auto SK search is not executed with the TUNER source. However, the SDK dots blink at the timing of search.

(It is executed like before with other sources.)

Reason: To prevent auto SK search from occurring in case the station tuned by the timer function is not a SK station.

## 4. Security Data Read/Write Specifications

The security data memory is read or written at timings (1) ~ (5) described in the following.

### 4-1. Code entry method

- 1. After turning power ON, press and hold the K2l key for more than 3 seconds.
- 2. Preset keys 1 ~ 4

		CODE		
1	• • • •	CODE	0	0
1	• • • •	CODE	1	0
2	• • • •	CODE	10	0
2	• • • •	CODE	11	0
2	• • • •	CODE	12	0
3	• • • •	CODE	120-	0
3	• • • •	CODE	1 2 1 –	0
3	• • • •	CODE	122-	0
3	• • • •	CODE	123-	0
3	• • • •	CODE	1 2 4 –	0
4	• • • •	CODE	1240	0

End of entry until the 4th digit.

- 3. Press and hold the K2I key for more than 3 seconds....End of code entry.
- •The security mode is turned ON if the code is OK ....

### 4-2. Code request

In the security mode, the code request is issued when returning from BACK UP OFF or after reset ..(3)

1. Power ON

	CODE	0
	 (inp	(Displayed for 1 sec.) t restored)
• • • •	0	0 (1 sec. after)
••••	1	0
••••	10	0
• • • •	11	0
••••	12	0
• • • •	120-	0
• • • •	121-	0
• • • •	122-	0
• • • •	123-	0
• • • •	1 2 4 -	0
• • • •	1240	0

- 2. After the entry until the 4th digit, press and hold the K2I key for more than 3 seconds to establish.
- •When the code is OK....Power ON .....(4)
- Second time and after: When the code is No Good WAIT (Entry is head for 5 min.) ......(5) 5 minutes later....--- (Entry possible)

Hereafter, the hold time after the entered code is No Good changes as shown below.

1st try	0
2nd try	0
3rd try	5 minutes
4th try	1 hour
5th try and after	24 hours
(The try count is display	ed on the right.)

(1) The security mode is permitted by the entry of the correct code.

Security mode ON write.

- (2) Security mode ON/OFF write.
- (3) Security mode data read after reset or when the set is attached (Security code, No Good try count, other data).
- (4) 0 is written in No Good try count.
- (5) The No Good try count is incremented by +1 and written.

## **CIRCUIT DESCRIPTION**

### 5. CK-50 Plunger Specifications

#### 5-1. Statuses which cause unlocking

- 1. Unlocking occurs when ACC is switched from ON to OFF while the panel is attached.
- 2. Unlocking occurs when the lever is moved upward while the panel is attached and ACC is ON.
- 3. Unlocking occurs when the panel is attache while ACC is OFF.

#### 5-2. Statuses which do not cause unlocking

- 1. While the panel is detached.
- 2. For 10 seconds after the set is installed or raset.
- 3. For 10 seconds after the completion of unlocking.

# 5-3. Reason of item 2 of "Status which do not cause unlocking"

When the microcomputer is reset while the panel is

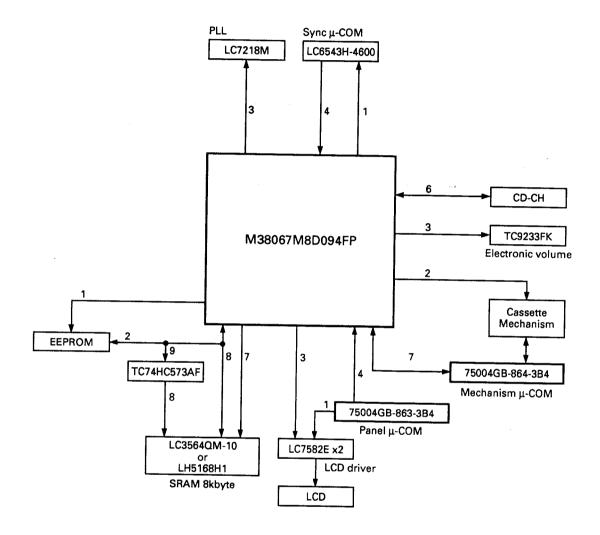
attached, the microprocomputer program starts assuming that the panel is not attached, so unlocking would occur because it detects that the panel is attached. If this operation takes place every 10 seconds, the plunger would be destroyed due to excessive unlocking.

Similarly, if the set is detached in 10 seconds after moving the detaching lever up then it is attached immediately and this operation is repeated, the plunger would be damaged because the microcomputer is reset every time the set is attached.

#### 5-4. Unlocking timing

Unlocking shall continue for 10 seconds, and a hold period of 10 seconds must be provided after the completion of unlocking.

6. Block Diagram of Microcomputers and Surroundings



## **CIRCUIT DESCRIPTION**

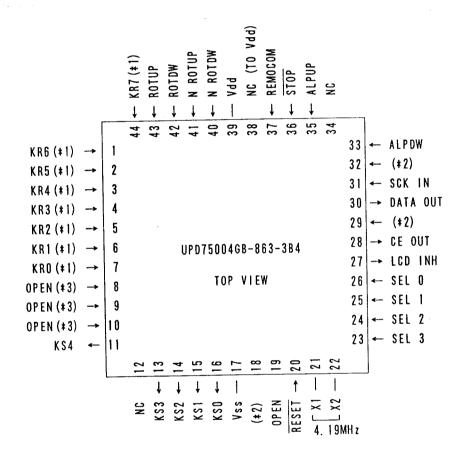
## 7. IC1: 75004GB-863-3B4 (X25-7042-70)

## Panel Microcomputer

#### Summary

This microcomputer is mounted in the panel of the '92 model with detachable panel specifications, and used to send the key data, remote control data and rotary control data inputs to the System Controller as command data. The System Controller operates based on the input commands.

### 7-1. Pin connection



\*1:Software pull up

\$2:Vss or Vdd

\*3:Mask option pull up

# **CIRCUIT DESCRIPTION**

7-2. Terminal Description (All pin numbers refer to flat package types)

7-2. Terminal Description		otion	(All pin numbers refer to flat package types.)
Pin No.	Pin Name	1/0	Description
1~7	KR6~KR0		Key Return 6~0 (Active Low). Internally pulled up. Programme selection.
8, 9		I	Not used. Open. Internally pulled up. Mask option.
10		1	Not used. Open. Internally pulled up. Mask option.
11	KS4	0	Key Scan 4 (Active Low). Open drain terminal. (Diode is not necessary).
12	NC	_	No Connection. Open.
13~16	KS3~KS0	0	Key Scan 3~0 (Active Low). Open drain terminal. (Diode is not necessary).
17	Vss	_	μ-COM earth GND.
18	XT1	-	Not used. Connected to Vdd or Vss.
19	XT2	_	Not used. Open.
20	RESET	1	Reset input.
21, 22	X1, X2	-	Ceramic oscillator connection terminal. (4.19 MHz)
23~26	SEL3~SEL0	1	Model selection check terminal. (Selected according to pull-up/pull-down).
			* Refer to terminal connection diagram.
27	LCDINH	0	LCD driver inhibit terminal
28	P_CE	0	Key data send request.
29			Not used. Connected to Vdd or Vss.
30	P_DATA	0	Key data line.
31	P_CLK	ı	Key data clock. (Max, 1 MHz)
32		ï	Not used. Connected to Vdd or Vss.
33	NARTDW	ı	Input to phase-type, double-edge rotary encoder manufactured by Alps. (Down)
34	NC	_	No Connection. Open.
35	NARTUP	1	Input to phase-type, double-edge rotary encoder manufactured by Alps. (Up)
36	P_STOP	1	Stop request (oscillation stop).
37	REMO	ī	Remote control data input.
38	NC	_	V <sub>DD</sub> ,
39	VDD	_	Power supply terminal, 5 V.
40	NRTDW	1	Input to phase-type, single-edge rotary encoder manufactured by Alps. (Down)
41	NRTUP		Input to phase-type, single-edge rotary encoder manufactured by Alps. (Up)
42	RTDW	$\neg$	Input to rotation direction pulse input type rotary encoder manufactured by Matsushita. (Down)
43	RTUP	1	Input to rotation direction pulse input type rotary encoder manufactured by Matsushita. (Up)
44	KR7	1	Key Return 7 (Active Low). Internally pulled up. Programme selection.
TE . All -	f the unused and		, and a series and

NOTE: All of the unused rotary encoder inputs must be pulled down to Vss.

# **CIRCUIT DESCRIPTION**

## 7-3. Terminals required for control

(1) System controller

Name	1/0	Contents
PANCON	0	Panel power supply terminal.
·		When the panel is attached, supplies power to the panel for initial start-up of the Panel μ-COM.
		Interlocked with the RESET terminal of the Panel µ-COM.
PANIN	ı	Terminal for detecting that the panel is attached on the head unit.
		PANCON must be turned OFF while the panel is not attached.
P_STOP	0	Stop request to Panel μ-COM. When power or Acc is turned OFF, sets the Panel μ-COM to the stop status in
		order to reduce the Back Up current. As the Panel μ-COM inhibits the LCD driver at the positive going of this
		terminal, the LCD display disappears for 1 second when this output is dropped for a moment.
		Therefore, to cope with possible terminal contact failure, this terminal is provided with a time constant of 20 to
		30 ms in the hardware. In case the output from this terminal is dropped, the System Controller should take this
		time constant in consideration and wait to ensure before restarting.
P_CE	1	Key data send request from Panel μ-COM.
P_CLK	0	Clock output to Panel μ-COM.
P_DATA	1	Key data input from Panel μ-COM.

(2) Panel u-COM

Name	1/0	Contents
RESET	1	Every time the System Controller turns PANCON output ON, this terminal is reset and the initial start of Panel
		μ-COM occurs. At this time, the Panel μ-COM checks that the EJECT key is ON and sends test mode codes.
STOP	. 1	Stop request input, which sets the Panel μ-COM immediately in the stop status. Even in stop status, key codes
		of certain keys continue to be transferred.
P_CE	0	Key data send request to System Controller.
P_CLK	1	Clock from System Controller.
P_DATA	0	Key data output to System Controller.

## 7-4. Key matrix

Key matrix and specifications of microcomputer for detachable panel

\* KRC-1054R/KRC-954R

KEY SCAN	KS4		KS3		KS2		KS1		T	
KEY RETURN	P50 (11	pin)	P43 (13p	in)	P42 (14		1		KS0	
KR0 (with built-in pull-up R)		· · · · · · · · · · · · · · · · · · ·	1.0 (10)				P41 (15p	oin)	P40 (16p	in)
P60 (7pin)	(SORCE)	90H	(AUDIO)	<b>★</b> H88	AM	*	① (AUTO)	*	PRESET 1	* ★
KR1 (with built-in pull-up R)	EJECT		(AODIO)	0011	<del></del>	80H		78H	KEY CORD :	70H
P61 (6pin)	20201	91H			FM	*	Ø (LOCAL)	*	PRESET 2	*
KR2 (with built-in pull-up R)		0111	VOL ATT			81H	A-ME	79H	<u></u>	71 Ĥ
P62 (5pin)			VOL ATT	*	DOWN	*	③ (COCK)	*	PRESET 3	*
o = topiny			LOUD	HA8	(Multiple	82H	(Multiple	7AH		72H
KR3 (with built-in pull-up R)	5500				presses of (	CLK)	presses of C	LK)		
	PROG		VOL UP	*	UP	*	④ (TI)	*	PRESET 4	*
P63 (4pin)		93H	*4 (Multiple	8BH	(Multiple			7BH		73H
1/2			presses of CI	LK)	presses of (	CLK)				/311
KR4 (with built-in pull-up R)			VOL DOWN	*	PRESET 6		® RDS	*	DDCCCT [F]	
P70 (3pin)			4 (Multiple	8CH		84H	@ NDO		PRESET 5	*
		ĺ	press of VOL			0411		7CH	*1	74H
KR5 (with built-in pull-up R)			■ NEGA/POS		■ CODE		<del></del>			
P71 (2pin)			ILL	8DH	K2I	*				
KR6 (with built-in pull-up R)				8DH	NZI	85H				
P72 (1pin)								1		
KR7 (with built-in pull-up R)										
P73 (44pin)		[						1		l

All pin numbers refer to flat package pins.

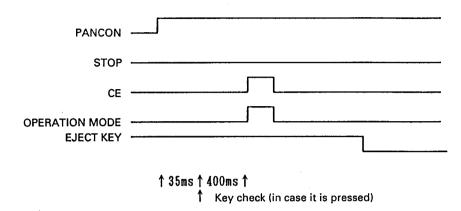
- \* Even while the STOP command to the Panel  $\mu ext{-COM}$ is in effect, when one of the 8 keys assigned to KS4 is pressed to ON, the stop status is released and the key code is sent. This makes the System Controller possible to return from the Power OFF status.
- \* As for the remote control codes, when a valid custom code is input, the key code is transferred provided that the key code is from 00H to 1FH.
- \* With the KRC-927, the following points differ from the table shown above

$\rightarrow$	ILL only.	KS3-KR5
$\rightarrow$	ATT only.	KS3-KR2
		KS1-KR3
$\rightarrow$	NEGA/POSI.	KS1-KR4
$\rightarrow$	K2I only.	KS2-KR5
	$\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$	<ul> <li>→ ILL only.</li> <li>→ ATT only.</li> <li>→ LOUD.</li> <li>→ NEGA/POSI.</li> <li>→ K2I only.</li> </ul>

## **CIRCUIT DESCRIPTION**

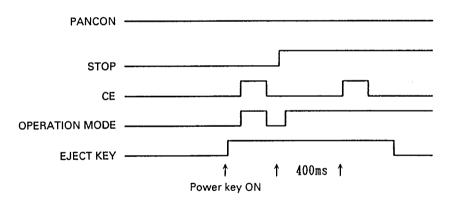
### 7-5. Timing chart

(1) Reset by RESET switch on the panel



When the Panel  $\mu$ -COM is reset, Whether the TAPE (Source) or EJECT key is pressed ON or not is checked in the initial processing, and "51H" (TAPE) and "52H" (TAPE) are sent if the key is pressed, and "50H" is sent if it is not.

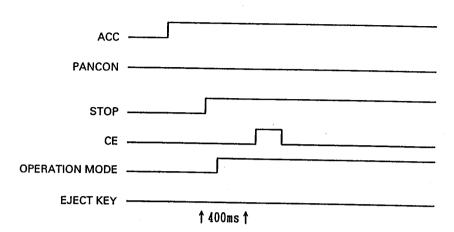
(2) POWER key pressed ON in stop status



When the POWER key is pressed ON, one of three kinds of key codes shown below are sent. The System Controller executes the power ON operation according to the key code.

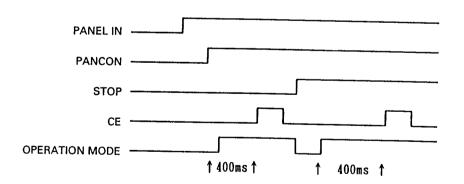
- In case 1 + 5 are also pressed simultaneously: "61H" Destination change
- II. In case 2 + 3 are also pressed simultaneously : "62H" Not used
- III. In case 1 + 3 are also pressed simultaneously : 63H" DSI
- IV. In case TONE is pressed simultaneously : "64H" Security
- V. Other status than I, II, III and IV above : "60H"
- \* As the same processing as (3) is executed with the timings marked \*, the System Controller should ignore them.

(3) When Acc is turned ON in case the last power OFF was executed by turning Acc OFF



When the POWER key is pressed ON, one of three kinds of key codes shown below are sent. The System Controller executes the power ON operation according to the key code.

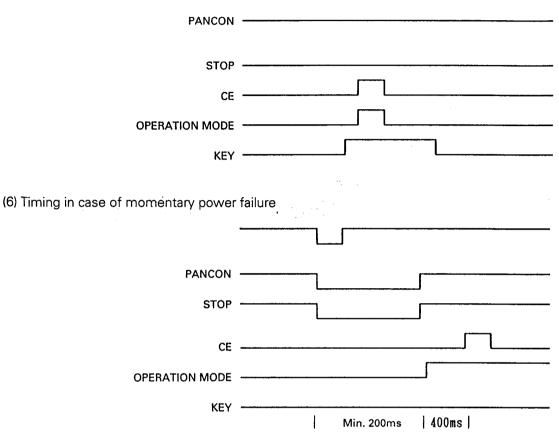
- I. In case 1 + 5 are also pressed simultaneously : "61H" Destination change
- II. In case 2 + 3 are also pressed simultaneously : "62H" Not used
- III. In case 1 + 3 are also pressed simultaneously : "63H" DSI
- IV. In case TONE is pressed simultaneously : "64H" Security
- V. Other status than I, II, III and IV above : "60H"
- (4) When the panel is attached in case the last power OFF was executed by detaching the panel In this case, the last power ON status is stored in memory and the unit starts with TUNER ON.



As the Panel  $\mu$ -COM cannot judge where a start is caused by resetting the unit or attaching the panel, it executes both processing (1) and (3). As a result, the System Controller executes processing (1) (ignoring key commands) first, then executes processing (3) (ignoring key commands).

## **CIRCUIT DESCRIPTION**

(5) When the EJECT, TUNER, TAPE or CD-CH key is pressed in stop status



In case of momentary power failure, because the panel power and the STOP terminal are provided with time constants, the status should be held for 200 ms or more after PANCON or STOP is stopped.

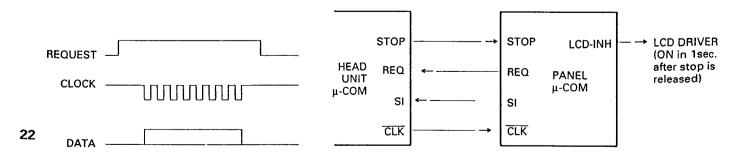
# 7-6. Communication method (3-wire, unidirectional)

The head unit outputs CLOCK (8 bits) at the positive going of REQUEST from the Panel  $\mu$ -COM. The data the head unit receives at this time becomes the key data.

If the Panel  $\mu$ -COM does not receive the CLOCK input within 100 ms after it rises REQUEST, it identifies a communication error, turns REQUEST OFF and restart the communication.

While STOP is Low, this restart operation is tried up to 5 times per key input, and after the 5th try the panel returns in the stop status.

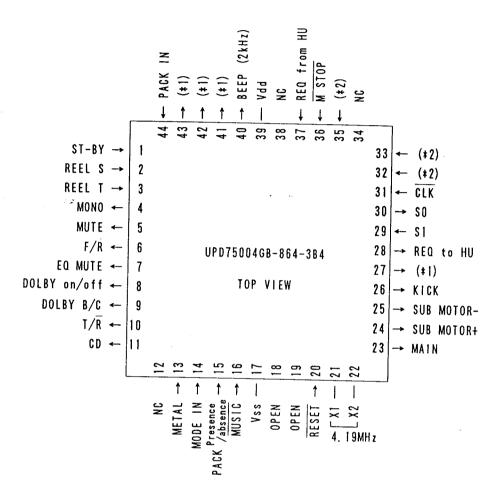
The Panel  $\mu$ -COM uses the serial ports. Data is input at the positive going of CLOCK.



8. IC17: 75004GB-864-3B4 (X14-5002-70)

**Casette Mechanism Microcomputer** 

8-1. Pin connection



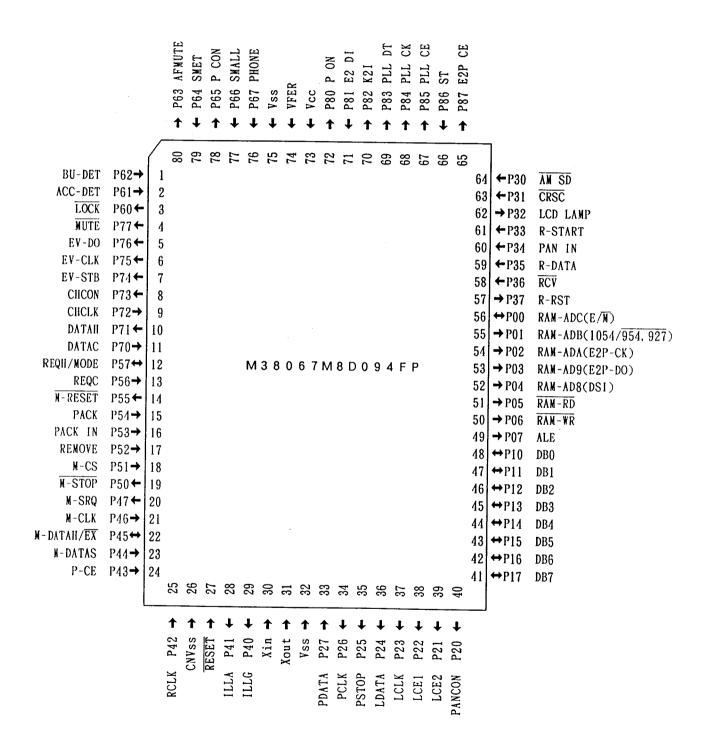
\*1:Pull up or pull down
\*2:Vss or Vdd

# **CIRCUIT DESCRIPTION**

8-2. Terminal Description (All pin numbers refer to flat package types.)

	ninal Descrip	tion	(All pin numbers refer to flat package types.)								
Pin No.	Pin Name	1/0	Description								
1	ST-BY	l	Mechanism Stand-by switch input.								
2	REEL S	1	Supply reel pulse input.								
3	REEL T	1	Take-up reel pulse input.								
4	MONO	0	Forced monaural control output.								
5	MUTE	0	Muting output. (Not used)								
6	FWD/REV	0	Equalizer amplifier FWD/REV switching output.								
7	EQ MUTE	0	Equalizer muting output ("H" during play).								
8	DOLBY ON/OFF	0	Dolby output. "H" "H" "L"								
9	DOLBY B/C	0	Dolby output. ← DOLBY OFF ← DOLBY B ← DOLBY C								
			'H' 'L' 'H'								
10	T/R	0	Source switching control.								
11	CD	0	Radio CD-CH Tape								
	!		10 L H H								
			11 X L H								
12	NC	1	No Connection. Open.								
13	METAL		Metal tape detection ("L" = Metal).								
14	MODE IN		Mode pulse detection ("L" = Mode).								
15	PACK DETECT		Cassette pack present/absent detection ("H" = Pack detected).								
16	MUSIC		Music detection for music search ("H" = Blank).								
17	Vss	1	μ-COM earth GND.								
18, 19	XT1, XT2	_	Not used. Open.								
20	RESET	1	Reset input.								
21, 22	X1, X2	1	Ceramic oscillator connection terminal. (4.19 MHz)								
23	MAIN	0	Main motor output.								
24	SUB+	0	Sub motor forward output.								
25	SUB-	0	Sub motor reverse output.								
26	KICK	0	Kick output for escape from gear mesh.								
27		0	Not used. Pulled up or pulled down.								
28	REQ TO HU	0	Communication request to head unit.								
29	S1	ı	Serial data input line.								
30	S0	0	Serial data output line.								
31	CLK	I	Serial clock input line.								
32, 33		1	Not used. Connected to VDD or Vss.								
34	NC	_	No Connection. Open.								
35		l	Not used. Connected to Vpp or Vss.								
36	M-STOP	1	Stop request. (Oscillation stop)								
37	RQ FROM HU	1	Communication request from head unit.								
38	NC	_	No Connection. Open.								
39	VDD	_	Power supply terminal. 5 V.								
40	BEEP	0	Beep output. (2 kHz)								
41~43		0	Not used. Pulled up or pulled down.								
44	PACK IN	ı	PACK-IN switch input.								

- 9. IC16: M38067M8D094FP (X14-5002-70)
  - System Microcomputer
- 9-1. Pin connection



# **CIRCUIT DESCRIPTION**

9-2. Terminal Description

Pin No.	Port No.	Pin Name	1/0	Active	Function	Hal
1	P62	BU-DET	1	L	Momentary power failure detection. Momentary failure = "H".	
2	P61	ACC-DET	I		Acc ON/OFF input. ON = "L".	
3	P60	LOCK	0	L	CK-50 control ON = "L". ("H" when unlocked)	L
4	P77	MUTE	0	L	Muting ON/OFF.	Н
5	P76	EV-DO	0		Electronic volume data.	L
6	P75	EV-CLK	0		Electronic volume clock.	L
7	P74	EV-STB	0	Н	Electronic volume STB.	L
8	P73	CHCON	0	Н	CD-CH control ON/OFF.	L
9	P72	CHCLK	1		CD-CH clock.	
10	P71	DATAH	0	· .	CD-CH output data.	L
11	P70	DATAC	1		CD-CH input data.	
12	P57	REQH/MODE	0/1	L	CD-CH request output. In test mode, K2I mode read.	L
13	P56	REQC	i	L	CD-CH request input.	L
14	P55	M-RESET	0	L	Cassette mechanism controller reset.	Н
15	P54	PACK	i	,	Cassette pack detection. Detected = "L".	T
16	P53	PACK IN		Н	Cassette PACK-IN switch input. PACK IN = "H".	<del>                                     </del>
17	P52	REMOVE		''	Panel detached detection input. Attached = "H".	
18	P51	M-CS	1		Cassette mechanism controller CS.	Н
19	P50	M-STOP	0	L	Cassette mechanism controller cos.  Cassette mechanism controller output stop.	L
20	P47	M-SRQ	0	L	Cassette mechanism controller SRQ.	<del>                                     </del>
21	P46	M-CLK	1	L	Cassette mechanism controller communication clock.	Н
22	P45	M-DATAH/		<u> </u>	Output data for communication with cassette mechanism controller.	Н
22	F40	EX RST	,		During RESET, "L" for forced reset operation (Memory clear).	'
23	P44	M-DATAS	ļ <u>,</u>	1		<del> </del>
23	P44	P-CE	1	L <sub>.</sub>	Input data for communication with cassette mechanism controller.	-
			<del> </del>		Panel μ-COM Chip Enable.	┼
25	P42	RCLK	<del>                                     </del>	CNID	Sync µ-COM Clock.	
26	CNVss		<del>                                     </del>	GND	Chip operation control (single mode "L").	-
27	RESET		1 1	L	Reset.	╁.
28	P41	ILLA	0	H	Illumination - Amber - ON.	┼
29	P40	ILLG	0	Н	Illumination - Green - ON.	<u> </u>
30	XIN				Oscillator connection.	<del> </del>
31	XOUT		0		Oscillator connection.	<del> </del>
32	Vss				Earth GND.	ļ
33	P27	PDATA	l		Panel μ-COM communication data.	<u> </u>
34	P26	PCLK	0	Н	Panel μ-COM communication clock.	<u> </u>
35	P25	PSTOP	0	L	Panel μ-COM oscillation stop.	<u>  L</u>
36	P24	LDATA	0		LCD data.	L
37	P23	LCLK	0		LCD clock	L
38	P22	LCE1	0	Н	LCD driver CE1.	L
39	P21	LCE2	0	Н	LCD driver CE2.	L
40	P20	PANCON	0	Н	Panel μ-COM power control (Panel detached = "L").	
41~48	P17~P10	DB7~DB0	1/0		SRAM data bus.	L
49	P07	ALE	0		Latch output.	L
50	P06	RAM-WR	0		SRAM write	L
51	P05	RAM-RD	0		SRAM read	L
52	P04	RAM-AD8	0		SRAM address/When panel is detached, used as the DSI rulse output.	L
53	P03	RAM-AD9	0		SRAM address/EEPROM data output.	L
54	P02	RAM-ADA	0		SRAM address/EEPROM clock.	L
55	P01	RAM-ADB	0		SRAM address/Initial setting (222/224).	L
56	P00	RAM-ADC	0		SRAM address/Initial setting (E/M).	L
57	P37	R-RST	0		Sync μ-COM reset.	l
58	P36	RCV	1		Sync detection.	
59	P35	R-DATA			Sync μ-COM data.	
60	P34	PAN IN		-	Panel detection. Panel detached = "L".	T-

# **CIRCUIT DESCRIPTION**

Pin No.	Port No.	Pin Name	1/0	Active	Function	Halt
61	P33	R-START	1		Sync μ-COM start data.	пап
62	P32	LCD LAMP	0	Н	LCD lamp control.	
63	P31	CRSC	I		Noise detection. Noise detected = "L".	<u>L</u>
64	P30	AMSD	Ī		FM: Band muting detection/AM: SD station detected = "L".	
65	P87	E2P-CE	0	L	EEPROM CE.	
66	P86	ST	1	<del></del>	Stereo/Mono.	
67	P85	PLL-CE	0		PLL CE.	
68	P84	PLL-CLK	0		PLL clock.	
69	P83	PLL-DT	0		PLL data.	— <del>  -</del>
70	P82	K2I	0	Н Н	K2I control. "H" = Forced Wide (K2I OFF). "L" = Auto (K2I ON).	
71	P81	E2 DI	ī		EEPROM data input.	
72	P80	P-ON	0		Peripheral power control.	
73	Vcc				Power supply.	<u>_</u>
74	VREF		1		A/D conversion reference voltage.	
75	Vss				Earth GND.	
76	P67	PHONE	1	L	EX muting.	
77	P66	SMALL		L	Small input.	
78	P65	P-CON	0	<u> </u>	P-CON output.	
79	P64	S-MET			FM field strength input.	
80	P63	AF-MUTE	0	L	Quick muting for AF search SD.	Н

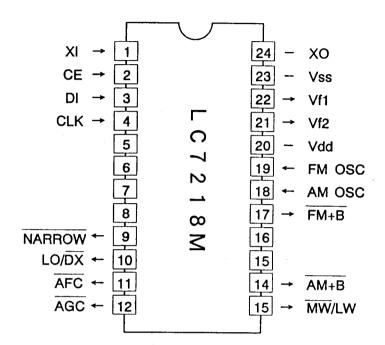
# KHU-1054H

# **CIRCUIT DESCRIPTION**

10. IC1: LC7218M (X14-5002-70)

PLL

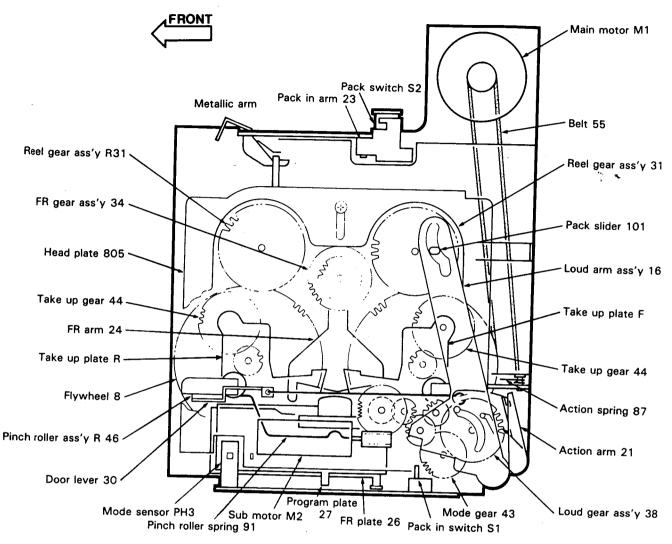
10-1. Pin connection



10-2. Terminal Description

Pin No.	Port No.	Pin Name	1/0	Active	Function
77	-		Ī		Not used (to earth GND).
8			ı		Not used (to earth GND).
9		NARROW	0	-	"L" in Forced Narrow mode (test mode).
10		LO/DX	0	_	LOCAL/DX switching.
11		AFC	0	L	Automatic frequency control (FM).
12		AGC	0	L	Automatic gain control (AM).
13		MW/LW	0	L	MW/LW switching.
14		AM (+B)	0	L	AM+B
17		FM (+B)	0	L	FM+B

# **MECHANISM OPERATION DESCRIPTION**



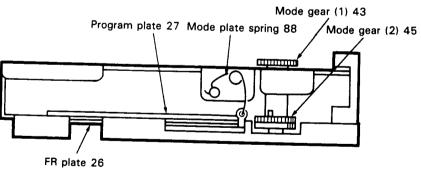
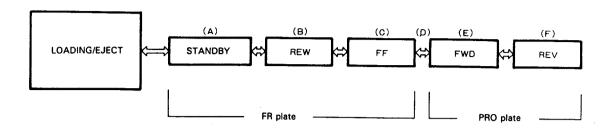


Fig. 1

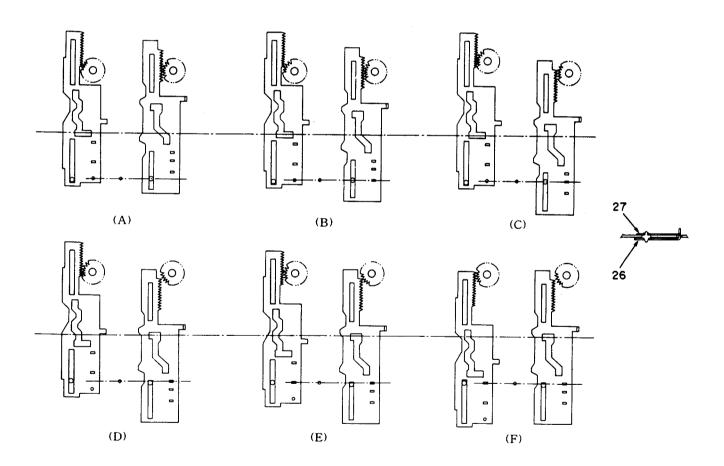
## **MECHANISM OPERATION DESCRIPTION**

## Mechanism operation modes

Each mode undergoes the following sequence:



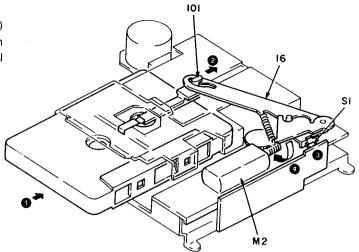
Each mode is determined by the positions of the FR and PRO plates.



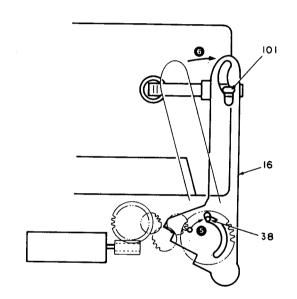
# **MECHANISM OPERATION DESCRIPTION**

### 1. Loading

When the cassette tape is pushed in ①, the loading arm (16) moves via the pack slider (101)... ②. Thus, the pack-in switch (S1) detects this... ③, and the sub motor (M2) makes normal rotation... ④.

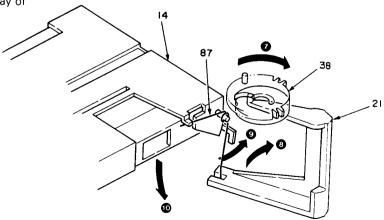


The rotation of the sub motor (M2) causes the load gear (38) to rotate by way of the idle gear... **5**. The load gear (38) provides the rotation of the loading arm (16) by its pin... **6**, to load in the cassette tape.



### 2. PACK DOWN

When the load gear (38) further rotates **7**, the action arm (21) also rotates **3** to lower the action plate (14)... **10**, by way of the action plate spring (87)... **9**.



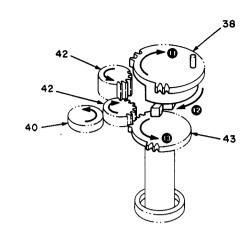
# KHC-1054H

## **MECHANISM OPERATION DESCRIPTION**

### 3. Change from load gear to mode gear

When the load gear (38) further more rotates 1, the boss under it pushes against the boss of the mode gear (43)... 2, so that the mode gear (43) rotates after the shift of its non-toothed section... 3.

Thus, the load gear (38) stops rotation on account of its non-toothed section coming.

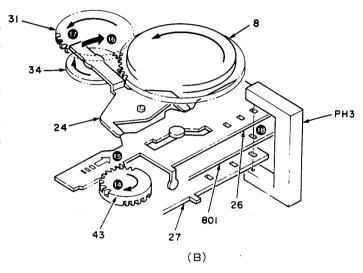


#### 4. REW

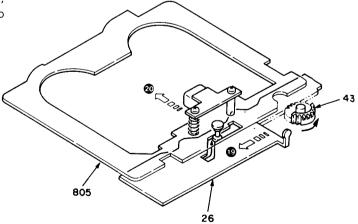
When the mode gear (43) rotates (0), the FR plate (26) under it moves (0). The cam of the FR plate (26) works to rotate the FR arm (24)... (0).

Further, the FR arm (24) moves to transmit the rotation of the flywheel (8) to the reel gear (31)... 17.

At this time, a slot (REW hole) of the FR plate (26) is detected by the mode sensor (PH3)... **(B)**, to stop the rotation of the sub motor.



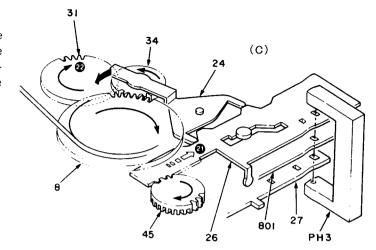
For REW or FF, due to the groove of the FR plate (26)... (19), the head plate (805) advances (20) so that the head moves to a position at which T-ADV is feasible.



# **MECHANISM OPERATION DESCRIPTION**

#### 5. FF

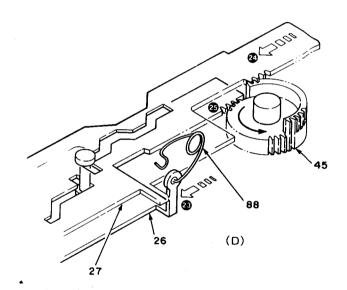
When the sub motor further rotates, the cam of the FR plate (26) moves (26) so that the FR arm (24) is rotated in the reverse direction... (26). Thus, a slot (FF hole) of the FR plate (26) is detected by the mode sensor (PH3) to stop the rotation of the sub motor.



## 6. Change from FR plate to PRO plate

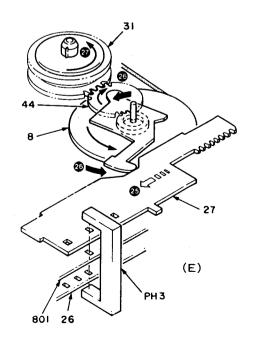
When the sub motor further more rotates, the knob of the FR plate (26) hits against the knob of the PRO plate (27)... ②, so that the PRO plate (27) moves.

Thus, the rack of the PRO plate (27) enters into engagement with the mode gear... 20. Then, the rack of the FR plate (26) is disengaged from the mode gear because of its non-toothed section coming... 25. The mode plate spring (88) assists in this operation.



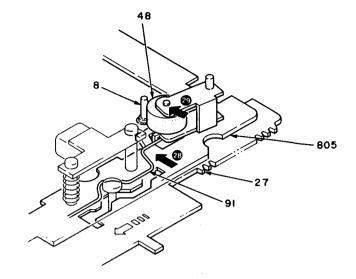
#### 7. FWD PLAY

When the PRO plate (27) moves , the takeup plate F is rotated by the cam of the PRO plate (27) and the takeup gear (44) engages with the reel assy (31)... . The rotation of the flywheel (8) is transmitted to the reel assy (31) by way of the takeup gear (44)... . Thus, a slot (FWD hole) of the PRO plate (27) is detected by the mode sensor (PH3) to stop the rotation of the sub motor.



## **MECHANISM OPERATION DESCRIPTION**

The groove of the PRO plate (27) serves to advance the head plate (805)... (3), to move the head and the pinch roller (48) to their FWD PLAY position. The pinch roller (48) is contacted to the capstan (8) by pressure due to the shift to the takeup plate and the force of the pinch roller spring... (3).

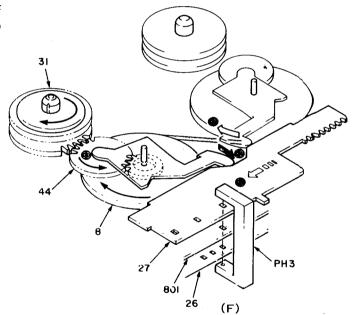


### 8. REV PLAY

When the PRO plate (27) further moves, the takeup plate F returns by the cam of the PRO plate (27)...  $\P$ , and the takeup plate R rotates  $\P$ .

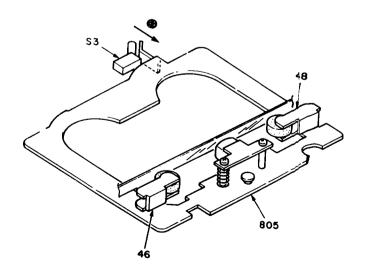
The rotation of the flywheel is transmitted to the reel assy (31) by way of the takeup gear (44)... 🔞.

Thus, a slot (REV hole) of the PRO plate (27) is detected by the mode sensor (PH3) to stop the rotation of the sub motor.



### 9. STANDBY (PAUSE)

From a given mode, when the head plate (805) regresses due to the reverse rotation of the sub motor rotates, when the pause switches (S3) acts ("L" to "H") to stop the rotation of the sub motor, the pause mode is entered.



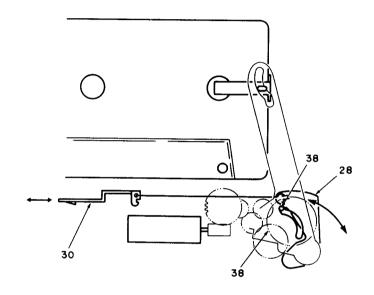
## **MECHANISM OPERATION DESCRIPTION**

### 10. EJECT

When the sub motor is reversely rotated, an operation reverse to the loading operation is performed to eject the cassette tape.

#### 11. SHUTTER DOOR

For loading or eject, the door arm (28) is actuated by the pin of the load gear (38). The door arm (28) moves the door lever (30) forwards or backwards to open or close the cassette door (lid).

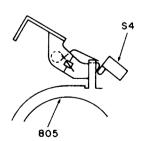


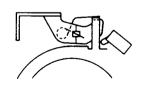
### 12. AUTO REVERSE

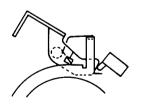
The tape end is detected by the sensor which senses the reel rotation.

#### 13. AUTO METAL

The auto metal switch (S4) detects the high position hole of the cassette tape when the head plate (805) is advancing.







## **ADJUSTMENT**

Set the controls and switches as follows.

:center position BALANCE :center position BASS :center position

LOUD T · ADV TREBLE :center position

LOCAL :OFF :OFF :OFF AUTO :OFF DOLBY NR :OFF

**FADER** TUNER ALIGNMENT OUTPUT INPUT (RECEIVER) SETTINGS FIG. ALIGN FOR No ITEM SETTINGS **POINTS SETTINGS FM SECTION** (A) Connect a DC TI FM 98.1MHz DISCRI-0V (a) voltmeter to TP1 1 (X14-B/5) 98.1MHz MINATOR 0dev (X14-B/5)60dB µ (ANT input) Test mode: (\*3) 98.1MHz Adjust it so that the Forced Wide **VR13** SEPARATION 1kHz, ±40kHz dev crosstalk from L to R and (B) 2 (X14-B/5) Pilot: ±6.0kHz dev (WIDE) R to L become minimum. FM Selector:L or R 98.1MHz 60dB (ANT input) Test mode: (\*3) 98.1MHz Forced Wide Separation VR15 1kHz, ± 40kHz dev **ANRC** (B) . 10dB (X14-B/5) Pilot: ±6.0kHz dev (WIDE) 3 FM Selector:L or R 98.1MHz 35dB \( (ANT input) (b) After 3 adjustment, measure DC voltage at 35 dBµ at TP2 (X14-B/5) and record. Output Noise level Test mode: (\*3) (A) SOFT Forced Wide VR11 -25dB U 98.1MHz (B) MUTE 1kHz, ±40kHz dev FM (X14-B/5) (When not add sny signal LEVEL to ANT terminal) 98.1MHz 60dB µ → No input Test mode: (\*3) (A) MUTE VR14 LCD "PAUSE" Forced Wide 98.1MHz SENSITIVITY 5 (X14-B/5) ON → OFF FM 0 dev LEVEL 98.1MHz 5 dB u (ANT input) Test mode: (\*3) (A) SEEK STOP Forced Wide LCD "DOB" VR2 98.1MHz 6 **SENSITIVIT** OFF → ON FM (X14-A/5) 0 dev LEVEL 20dB u (ANT input) 98.1MHz (C) Test mode: (\*4) 98.1MHz Connect a DC Forced Narrow Same as V35 1kHz,±40kHz dev VR1 NARROW (b) voltmeter to TP2 7 (X14-A/5) easured in Wide. Pilot: ±6.0kHz dev GAIN (X14-B/5) FΜ Selector:L or R 98.1MHz 35dB µ (ANT input) (C) Test mode: (\*4) 98.1MHz Adjust it so that the Forced Narrow 1kHz, ±40kHz dev **VR12** SEPARATION crosstalk from L to R and 8 (B) (X14-B/5) (NARROW) Pilot: ±6.0kHz dev R to L become minimum. FM Selector:L or R 98.1MHz 60dB (ANT input) MW SECTION Test mode: (\*5) (D) SEEK STOP LCD "DOC" AM mode VR3 999kHz (1) SENSITIVIT OFF → ON MW(X14-A/5)0% mod LEVEL 999kHz 35dB u (ANT input) CASSETTE DECK SECTION VR1(L) Connect an AC PLAYBACK 300mV (c) VR2(R) TAPE PLAY MTT-150 voltmeter to [1] LEVEL (X09-B/2)TP1(X09-B/2)

<sup>\*</sup> Test mode

With power OFF, press and hold (EJECT + D) while press RST SW.

LCD ON mode starts. Be careful because VRs are maximum at this moment!

Press SOURCE key to select TUNER (FM).

Press

<sup>|</sup> Key to select TONER (FM).
| K21 | key. "K21" goes OFF, "MTL" goes ON => Forced Wide. \*3
| ATT | key. "ATT" goes ON, "MTL" goes OFF => Forced Narrow. \*4
| AM | key to select TUNER (AM). \*5 Press

Press

RST SW to release test mode. Press

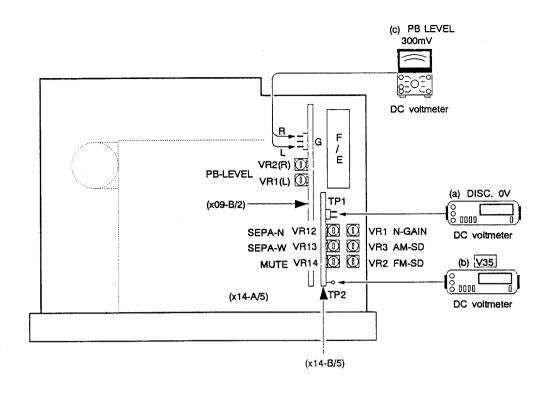
### **ABGLEICH**

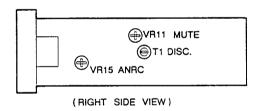
	gler und Knöpfe w ANCE :Mittelage ER :Mittelage	BASS :Mittelage	LOUD :OF	F AUTO	:OFF DO	OLBY NR :OFF	
NR	GEGENSTAND	EINGANGS EINSTELLUNG	AUSGANGS EINSTELLUNG	TUNER (RECEIVER) EINSTELLUNG	ABGLEICH PUNKTE	ABGLEICHEN FUR	ABI
Uŀ	W-ABTEILUN	G					J
1	DISKRI- MINATOR	(A) 98.1MHz 0 Hub 60dBµ(ANT-Eingang)	Den Gieichstrom Voltmeter zwischen den beiden Stiften von TP1 anschließer (X14-B/5)	FM 98.1MHz	T1 (X14-B/5)	0V	(a)
2	STEREO KANAL TRENNUNG (Weit)	(C) 98.1MHz 1kHZ,±40kHz Hub Pilot:±6.0kHz Hub Wahler: L or R 60dBµ(ANT-Eingang)	(B)	Testmodus: (*3) Weit erzwungen. FM 98.1MHz	VR13 (X14-B/5)	So einstellen, daß das Ubersprechen von L auf R und von R auf L minimal wird.	
3	ANRC (Weit)	(C) 98.1MHz 1kHZ,±40kHz Hub Pilot:±6.0kHz Hub Wahler: L or R 35dB⊔(ANT-Eingang)	(B)	Testmodus: (*3) Weit erzwungen. FM 98.1MHz	VR15 (X14-B/5)	Trennung 10dB	
	Nach der 3 Eins	tellung die Gleichspannung t	pei 35 dBL an TP2 (	(14-B/5) messen. →	V35		(b)
4	Weiche Dämpfung PEGEL	(A) 98.1MHz 1kHZ, ±40kHz Hub 60dBµ →No Eingang	(B)	Testmodus : (*3) Weit erzwungen. FM 98.1MHz	VR11 (X14-B/5)	Ausgangsrauschpeqel -25dB (Wenn nicht, ein beliebiges Signal an den ANT- Anschlußanlegen)	
5	Dämpfung- sempfindlichkeit PEGEL	(A) 98.1MHz 0 Hub 5dBµ(ANT-Eingang)	_	Testinodus : (*3) Weit erzwungen. FM : 98.1MHz	VR14 (X14-II/5)	LCD "PAUSE" EIN → AUS	
6	SUCHEN HALT PEGEL	(A) 98.1MHz 0 Hub 20dB µ (ANT-Eingang)	_	Testmodus : (*3) Weit erzwungen. FM : 98.1MHz	VR2 (X14-A/5)	LCD "DOB" AUS → EIN	
7	SCHMAL VERSTÄRKUNG	(C) 98.1MHz 1kHZ,±40kHz Hub Pilot:±6.0kHz Hub Wahler: L or R 35dBµ(ANT-Eingang)	Den Gieichstrom Voltmeter zwischen den beiden Stiften von TP2 anschlieβen (X14-B/5)	Testmodus : (* 4) Schmal erzwungen. FM 98.1MHz	VR1 (X14-A/5)	Gleich wie V35 gemessen in Weit.	(b)
8	STEREO KANAL TRENNUNG (Schmal)	(C) 98.1MHz 1kHZ, ± 40kHz Hub Pilot: ± 6.0kHz Hub Wahler: L or R 60dB \( \text{(ANT-Eingang)} \)	(B)	Testmodus : (* 4) Schmal erzwungen. FM 98.1MHz	VR12 (X14-B/5)	So einstellen, daß das Ubersprechen von L auf R und von R auf L minimal wird.	
MV	V-ABTEILUNG					<u> </u>	
(1)	SUCHEN HALT PEGEL	(D) 999kHz 400Hz,30% mod 35dB \( (ANT-Eingang)	-	Testmodus : (*5) AM modus MW 999kHz	VR3 (X14-A/5)	LCD "DOC" AUS → EIN	
CĄ	SSETTEN-DE	CK-ABTEILUNG				L. L	
[1]	WIDERGABE PEGEL	MTT-150	Einen wechsel- spannungsmesser zwischen zu TP1 anschließen. (X09-B/2)	Bandwiedergabe	VR1(L) VR2(R) (X09-B/2)	300mV	(c)

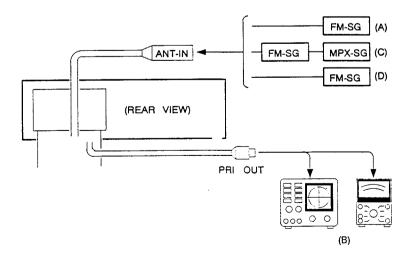
- Bei ausgeschalteter Spannungsversorgung (EJECT + ) gedrückt halten und RST SW drücken.
  Der LCD ON-Modus beginnt. Vorsicht, weil die Regelwiderstände zu diesem Zeitpunkt maximal sind!
  Die SOURCE -Taste drücken, um TUNER (FM) zu wählen.
  Die K2I -Taste drücken. "K2I" erlischt, "MTL" leuchtet => Weit erzwungen. \*3
  Die ATT -Taste drücken. "ATT" leuchtet, "MTL" erlischt => Schmal erzwungen. \*4
  Die AM Taste drücken um TINER (AM) zu wöhlen. \*5

- Die AM -Taste drücken, um TUNER (AM) zu wählen. \*5
   Zum Verlassen des Testmodus RST SW .drücken.

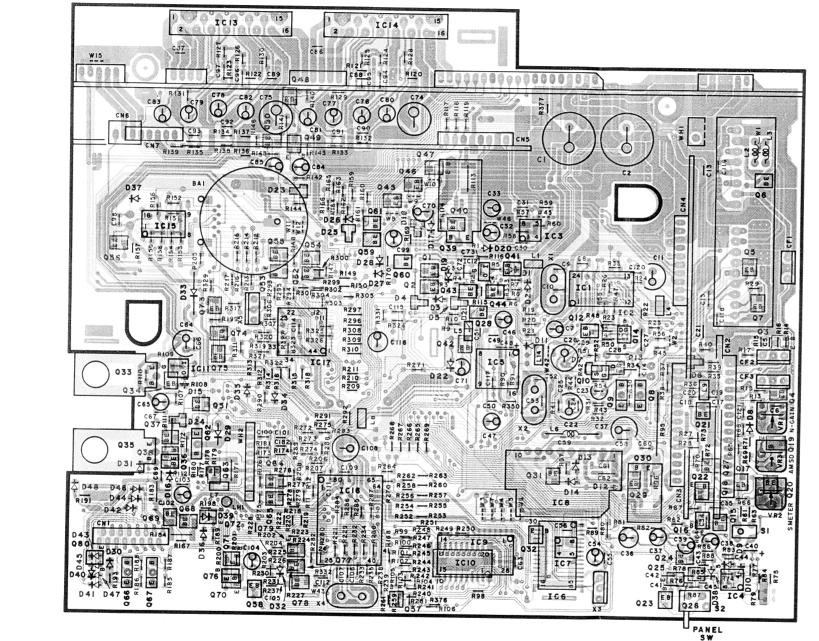
## **ADJUSTMENT**



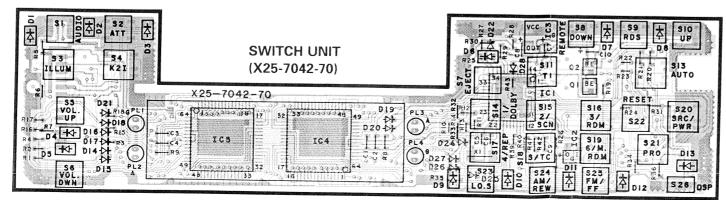




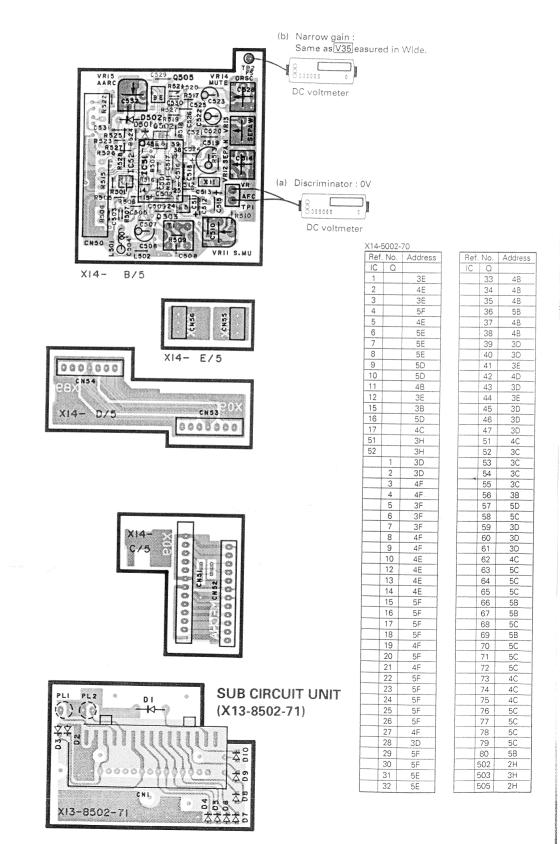
## PC BOARD (COMPONENT SIDE VIEW)



Ref.	No.	Address				
IC	Q					
1.		6E				
2		7E				
3		6E				
4		7D				
5		7C				
	1	6F				
	2	6F				

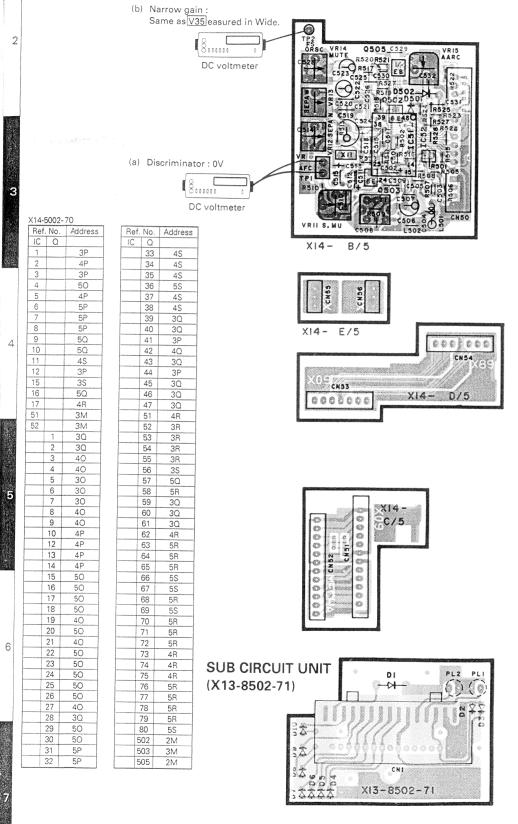


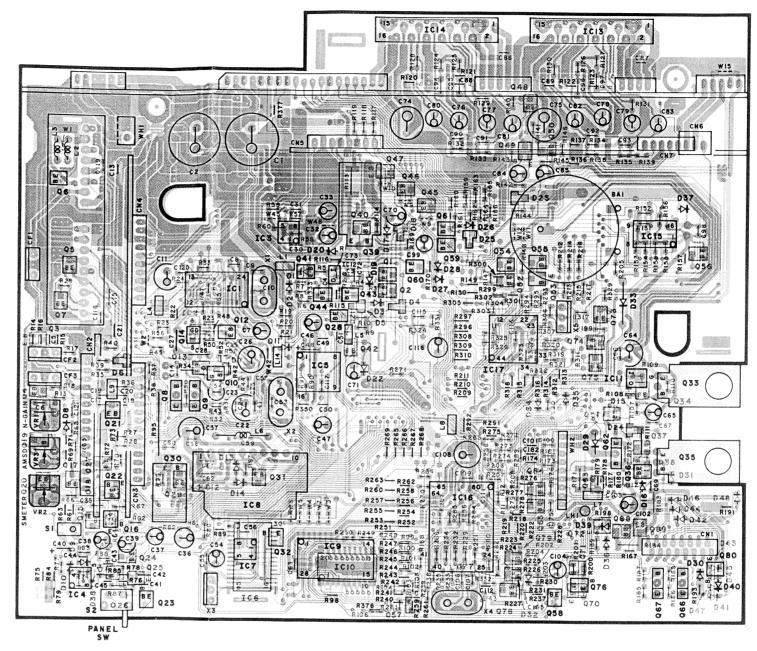
SYNTHESIZER UNIT (X14-5002-70)

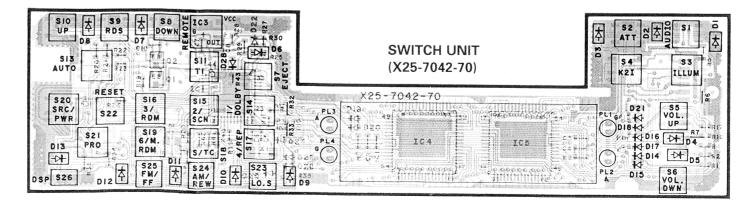


## PC BOARD (FOIL SIDE VIEW)

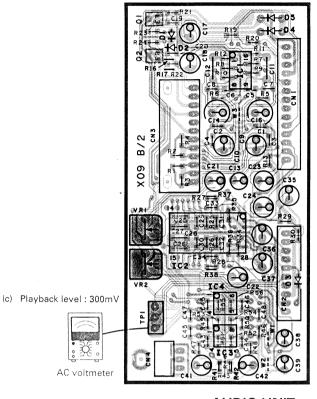
# SYNTHESIZER UNIT (X14-5002-70)







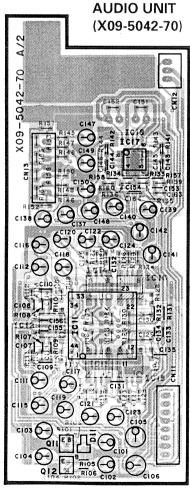
## PC BOARD (COMPONENT SIDE VIEW)



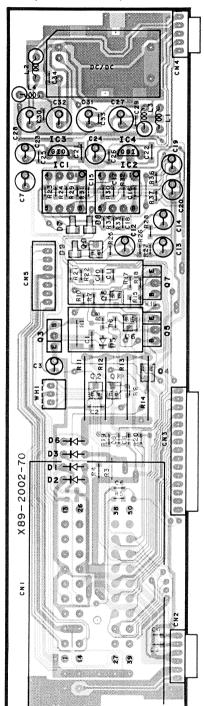
K09-5	042-7	70
Ref.	No.	Address
IC	Q	
1		2V
2		3V
		3V
4		3V
11		6V
12		6V
13		6V
14		6V
15		6V
16		6V
17		5V
18		5V
	1	1V
	2	2V

12

7V



DAUGHTER UNIT (X89-2002-70)

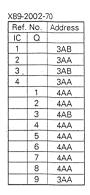


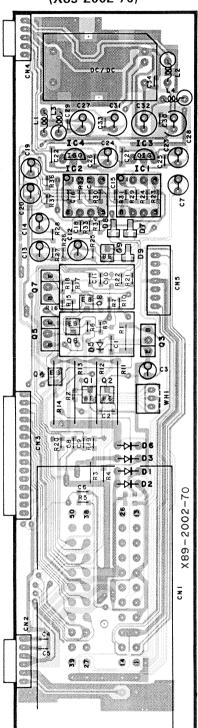
X89-2	2002-	70
Ref.	No.	Address
IC	Q	
1		3X
2		3X
3		3W
4		3X
	1	4X
	2	4X
	3	4W
	4	4X
	5	4X
	6	4X
	7	4X
	8	4X
	9	3X

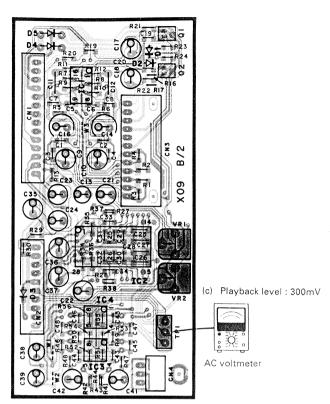
Refer to the schematic diagram for the values of resistors and capacitors.

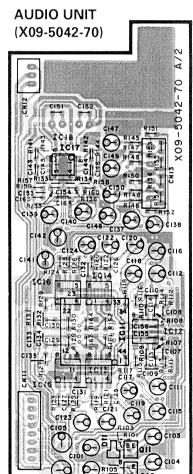
## PC BOARD (FOIL SIDE VIEW)

# **DAUGHTER UNIT** (X89-2002-70)

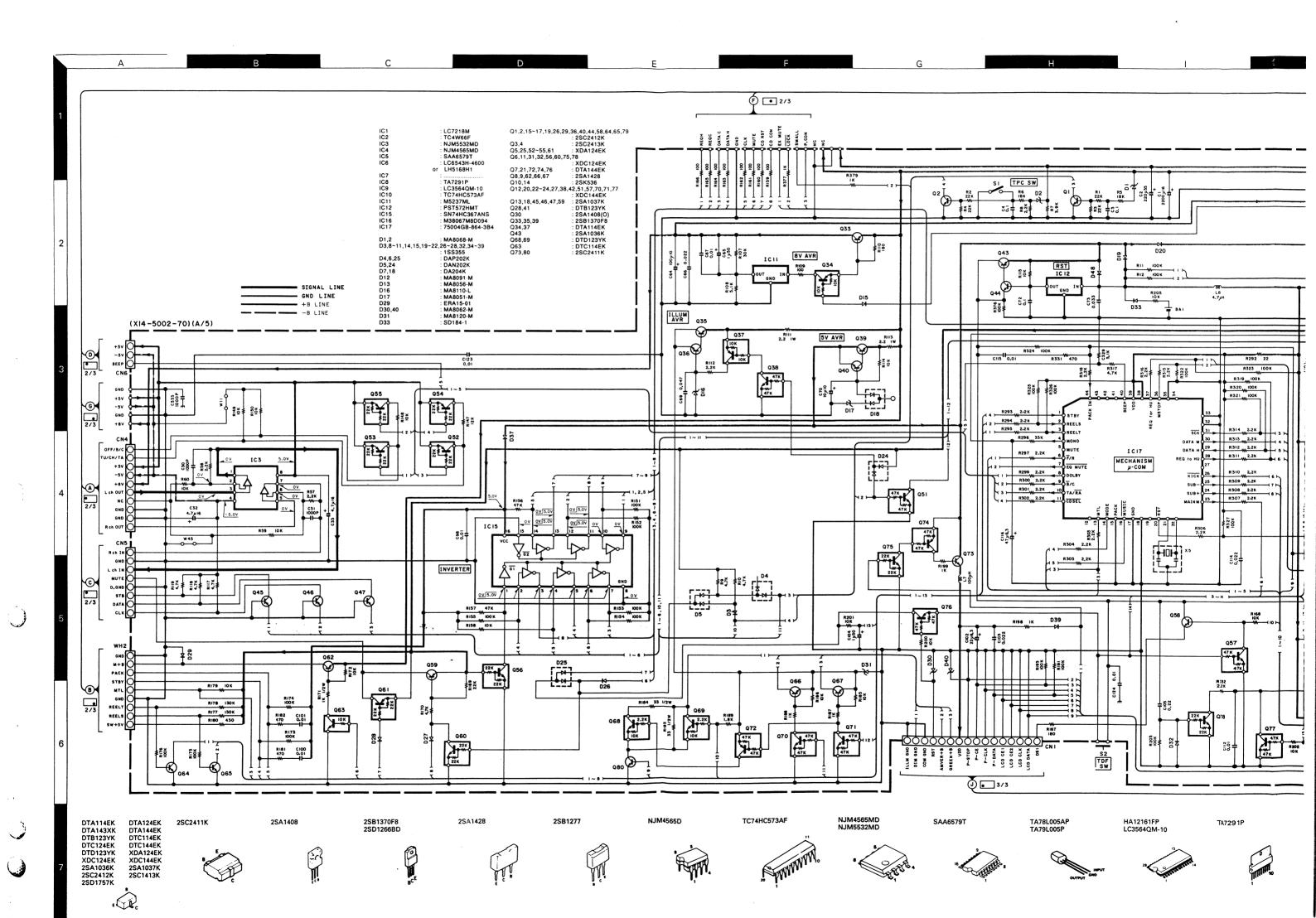


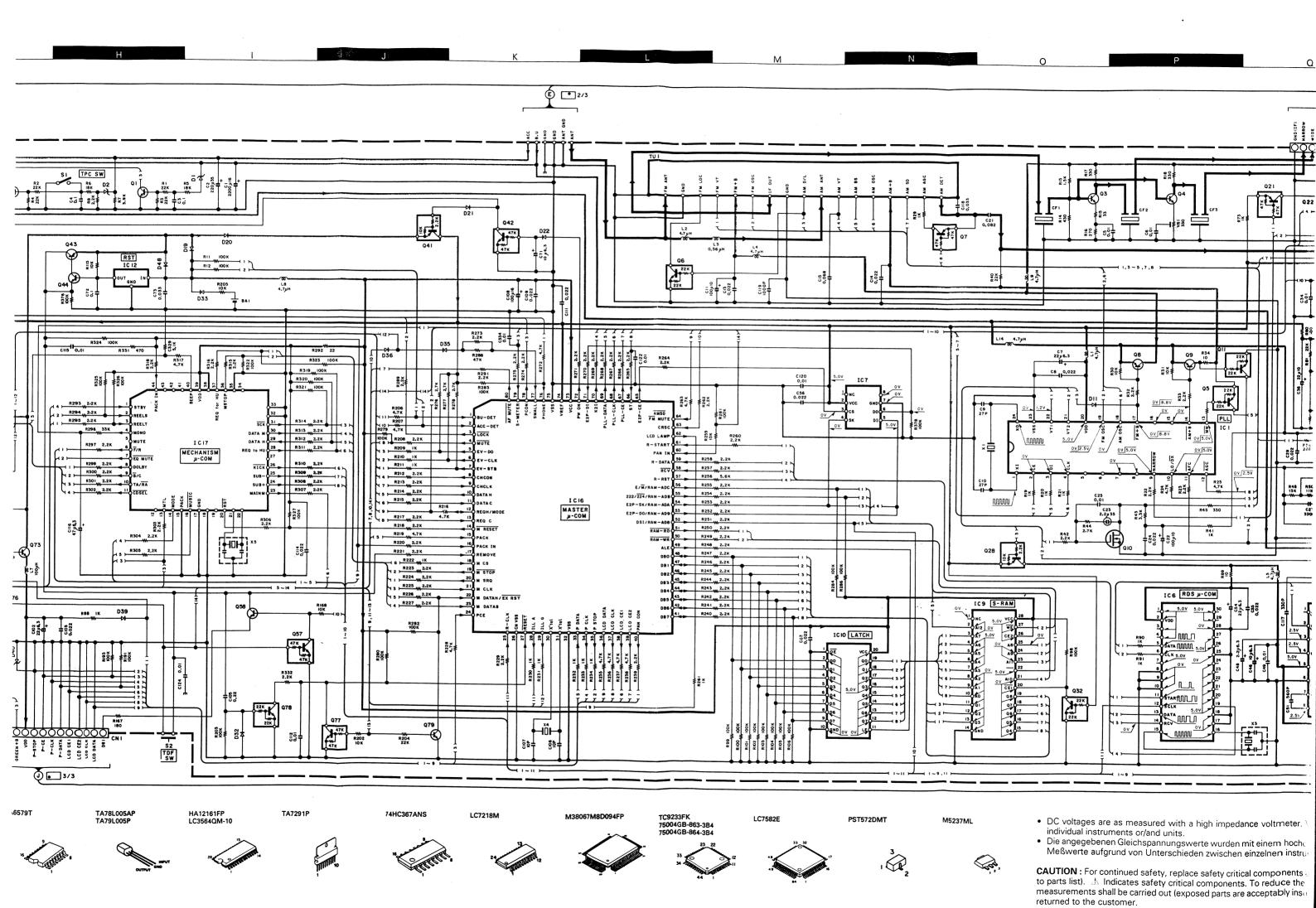


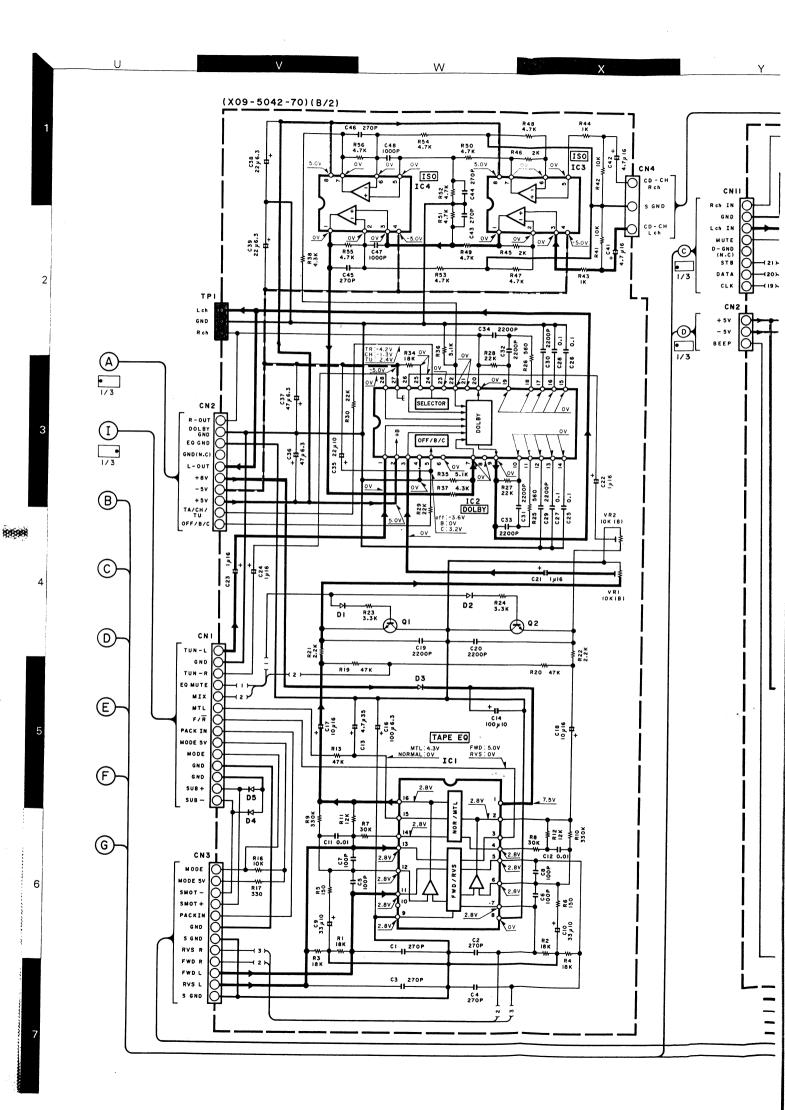


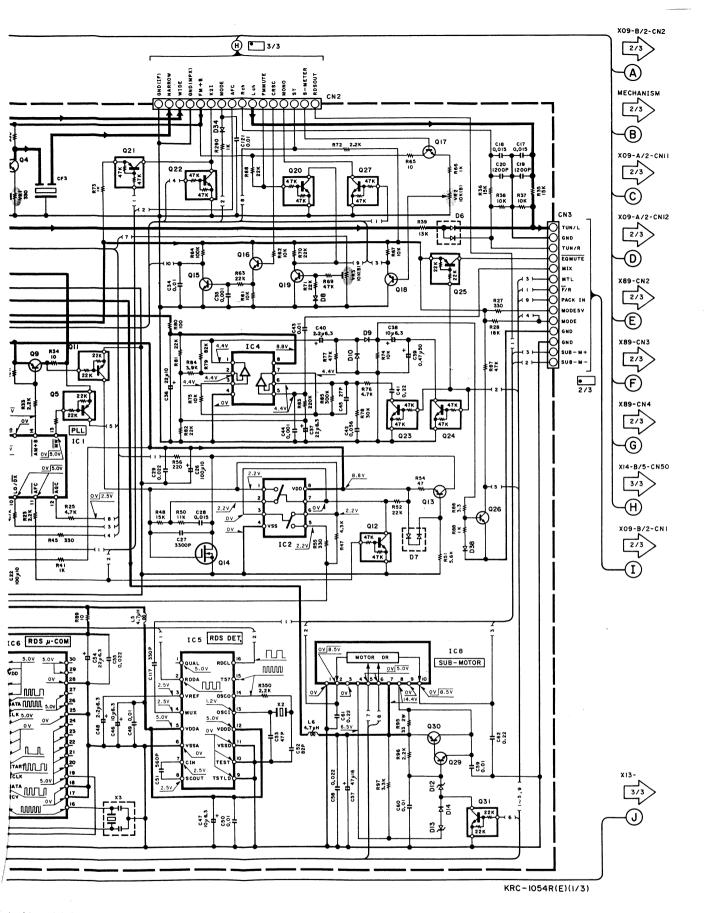


X09-5	5042-	70
Ref.	No.	Address
IC	Ω	
1		2AC
2		3AC
3		3AC
4		3AC
11		6AC
12		6AC
13		6AC
14		6AC
15		6AC
16		6AC
17		5AC
18		5AC
	1	1AC
	2	2AC
	11	7AC
	12	7AC







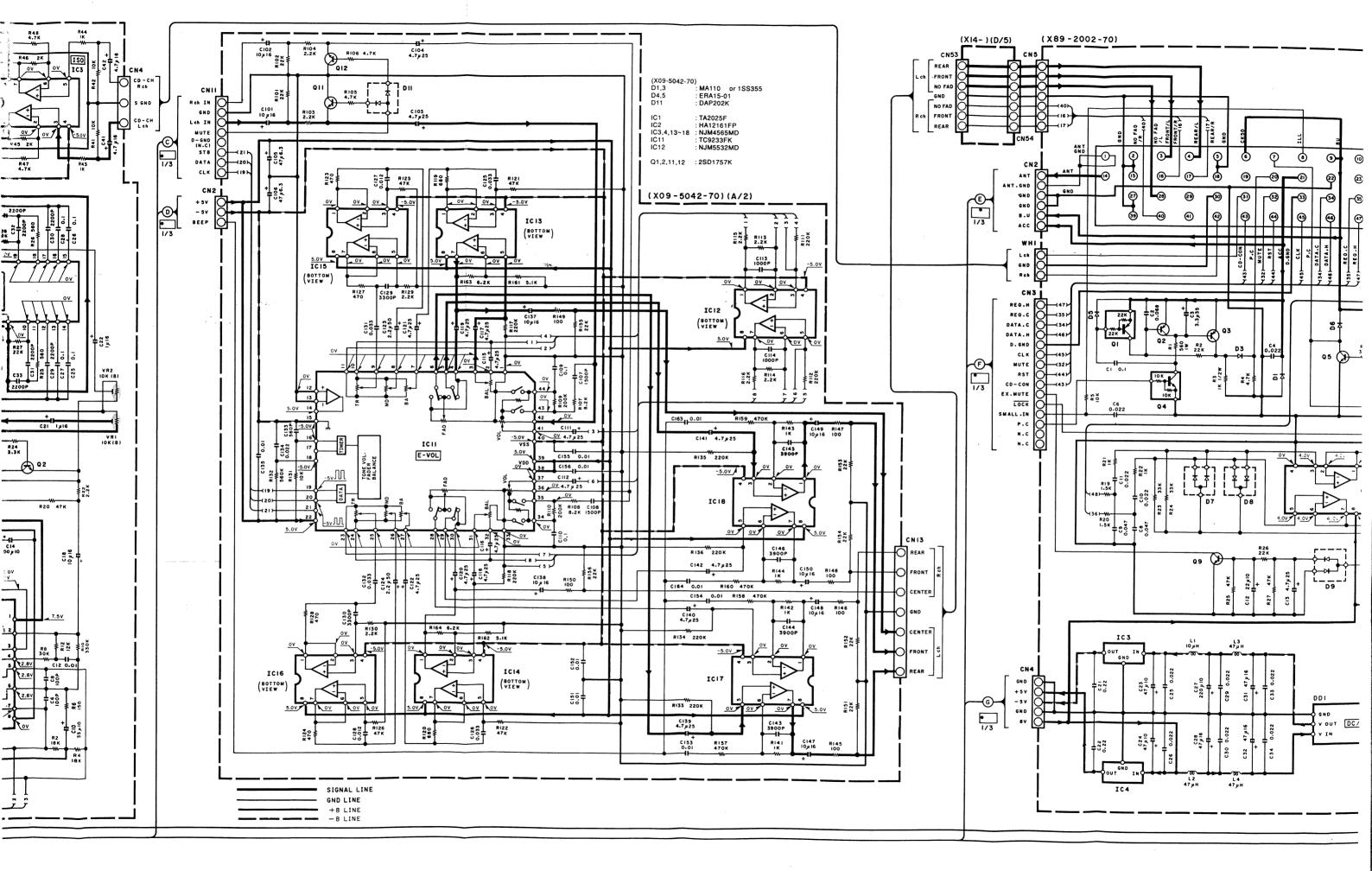


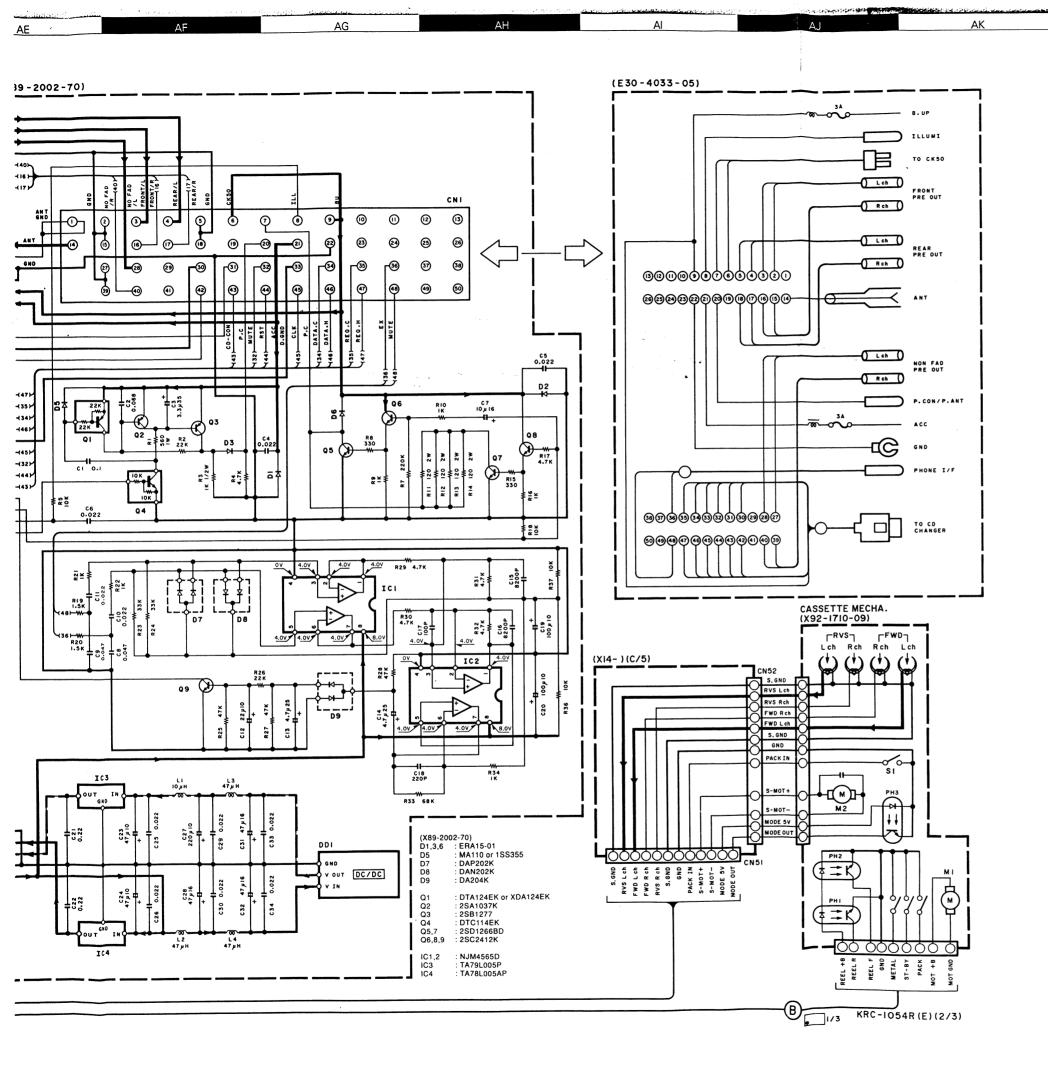
 ${\tt J}$  with a high impedance voltmeter. Values may vary slightly due to variations between units.

nungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die erschieden zwischen einzelnen instrumenten oder Geräten u.U. geringfügig.

y, replace safety critical components only with manufacturer's recommended parts (refer y critical components. To reduce the risk of electric shock, leakage-current or resistance but (exposed parts are acceptably insulated from the supply circuit) before the appliance is

KRC-1054R KENWOOD



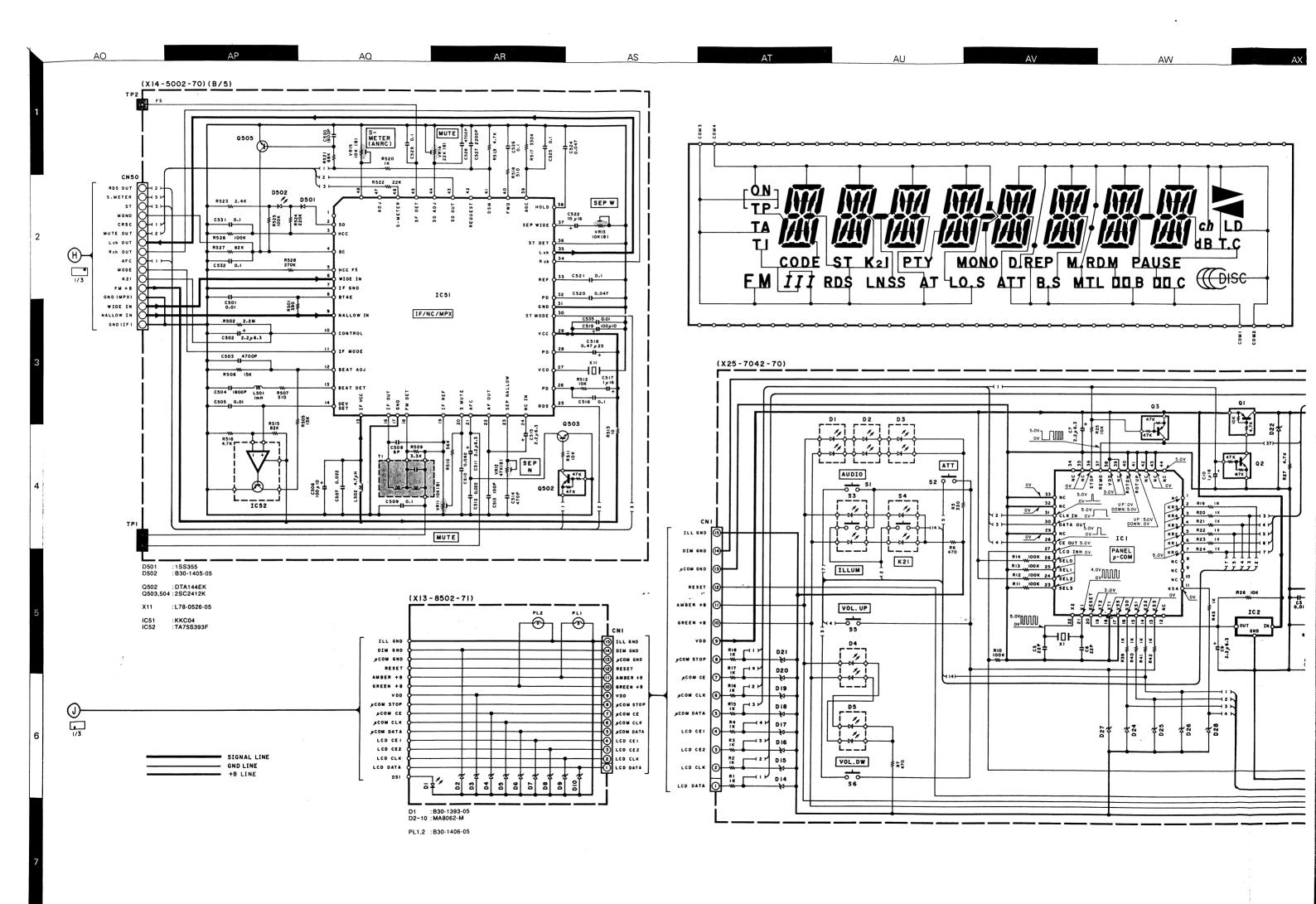


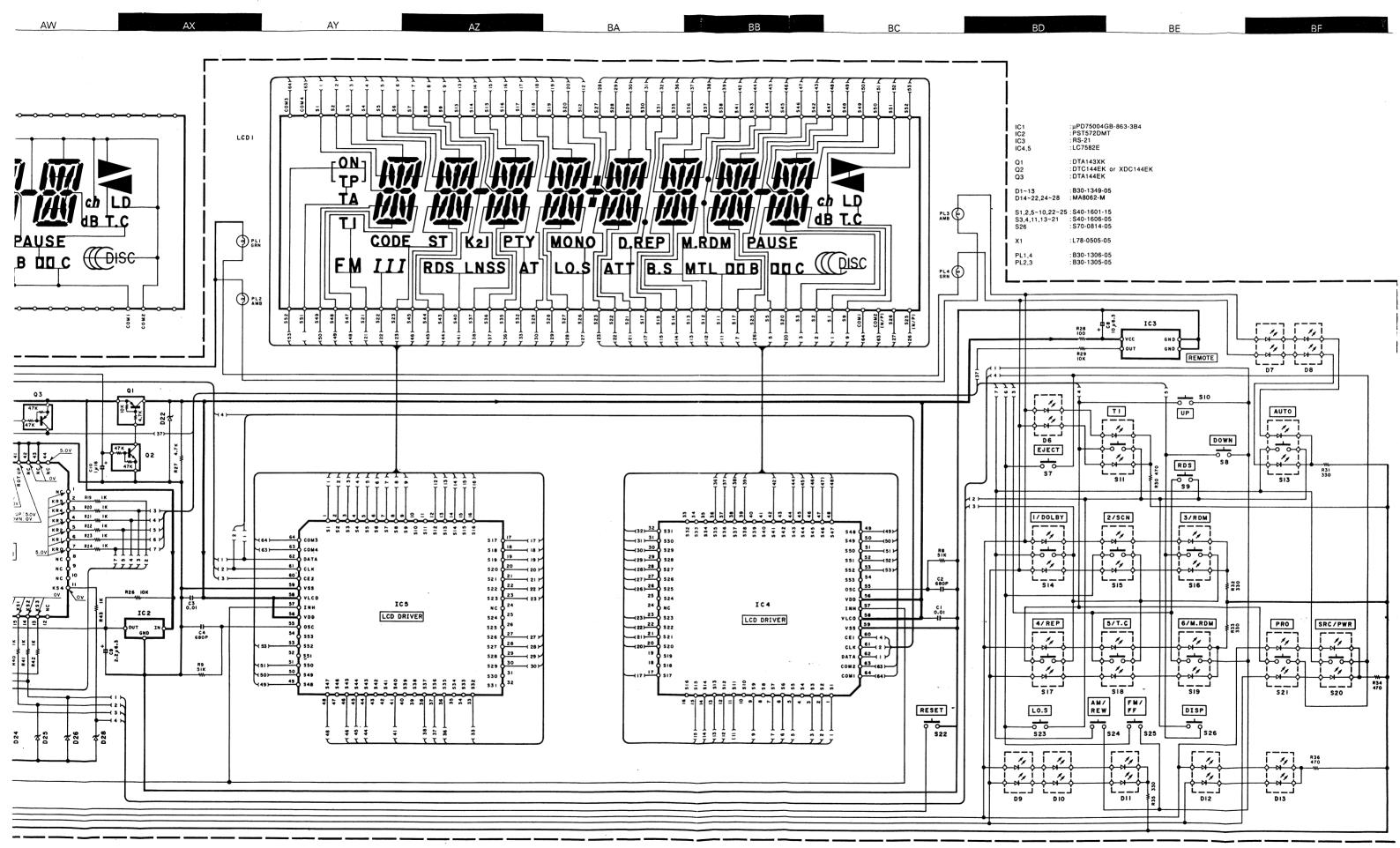
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u.U. geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). A Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.DOLBY and the double-D symbol are tradmarks of Dolby Laboratories Licensing Corporation. Noise reduction circuit made under license from Dolby Laboratories Licensing Corporation.

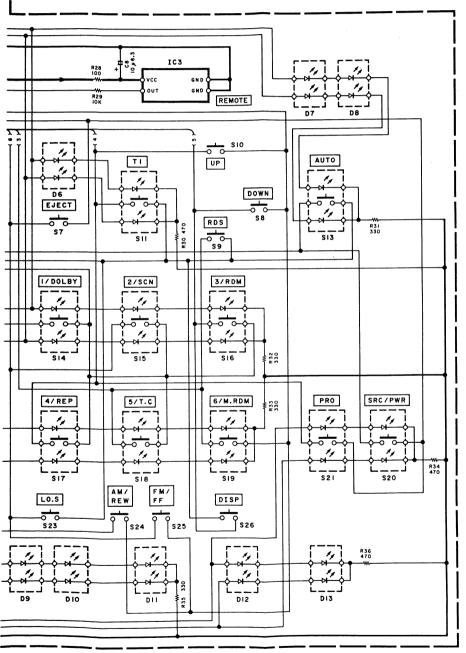
KRC-1054R KENWOOD

Y37-1082-70





KRC-1054R/954R



- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u.U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). 

Indicates safety critical components. To reduce the risk of electric shock, leakage-current orresistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) be fore the appliance is returned to the customer.

KRC-1054R/954R/927 (3/3)

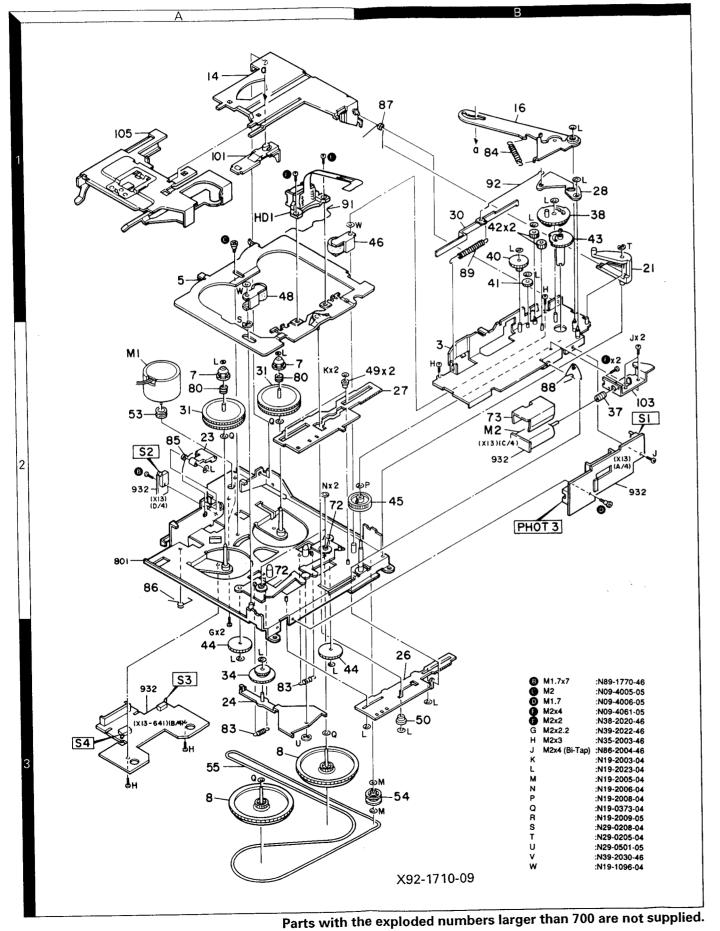
KRC-1054R KENWOOD

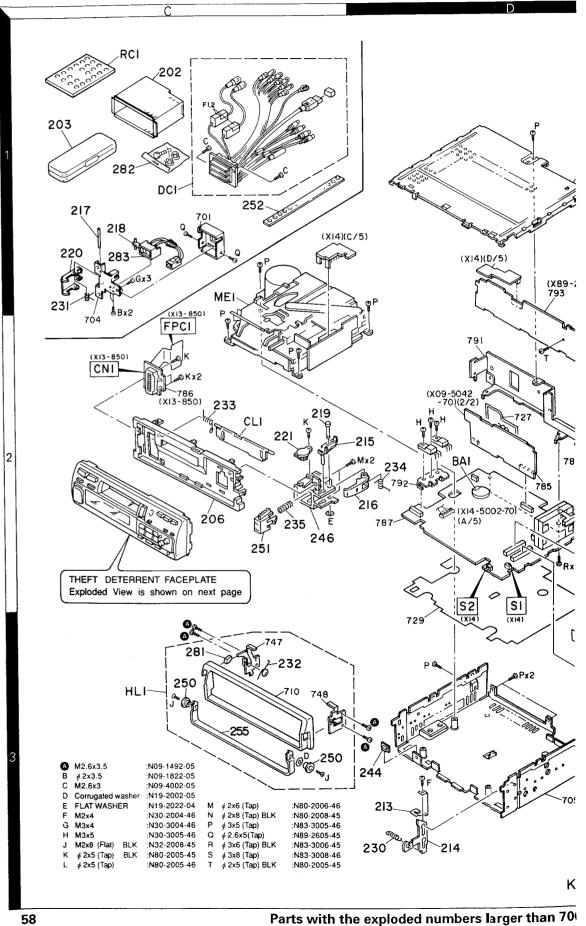
57

KRC-1054R KRC-1054R

**EXPLODED VIEW (UNIT)** 

# **EXPLODED VIEW (MECHANISM)**





# KRC-1054R KRC-1054R

# **EXPLODED VIEW (FACEPLATE)**

## **PARTS LIS**

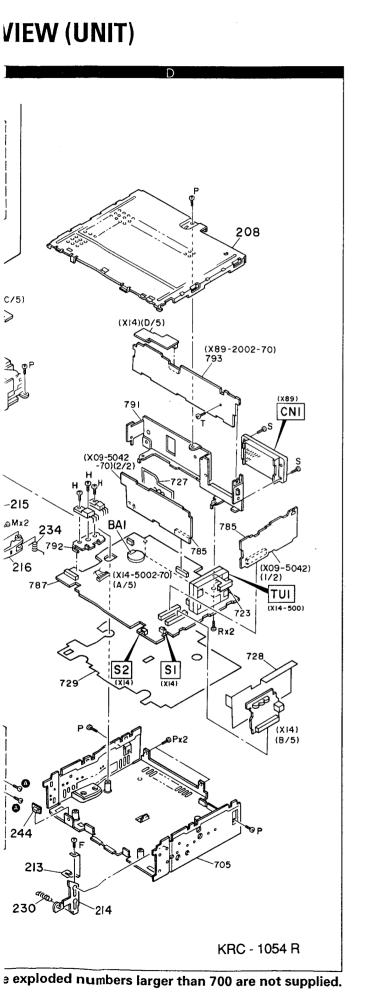
Parts without Parts No. are not supplied.

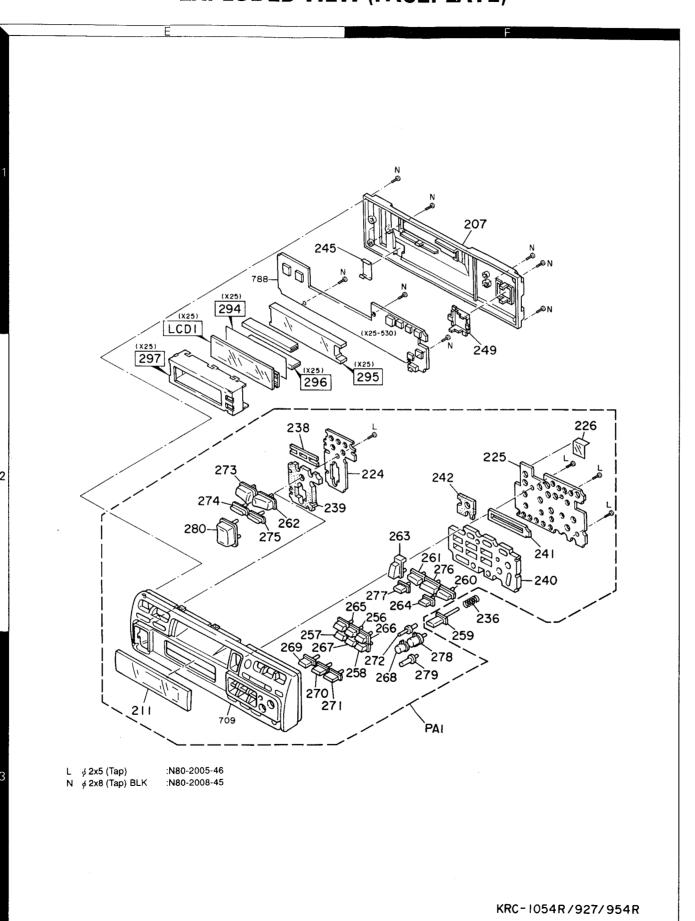
Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No.	Address		Parts N	lo.	
参照番号	位 置	Parts 新	部品番	号	部。
		L		KR	C-1054R
202 203 206 207	1C 1C 2C 1F	*	A01-2565-0 A02-1421-0 A22-1212-1 A46-1213-0	1 1	METALLIC CA PLASTIC CAB SUB PANEL REAR COVER
208	1 D	*	A52-0655-0	I	TOP COVER
CL1 PA1 RC1	2C 3F 1C	*	A53-1563-0 A64-0048-1 A70-0827-0	2	CASSETTE LI PANEL ASSY REMOTE CONT
211	3E	*	B10-1543-0 B46-0100-2 B46-0608-0 B64-0245-0 B64-0246-0	0 4 0	FRONT GLASS WARRANTY CAI ID CARD INSTRUCTION INSTRUCTION
HL1	3C	*	B64-0247-0 B07-2036-0	0	INSTRUCTION ESCUTCHEON
213 214 215 216 217	3D 3D 2C 2C 1C	*	D10-2550-2 D10-2684-2 D10-2776-1 D10-2778-2 D21-1346-0	4 4 4	LEVER LEVER LEVER ASSY ARM SHAFT
218 219 220 221	1C 2C 1C 2C	*	D21-1419-0 D21-2127-0 D32-0162-0 D39-0211-0	4 3	SHAFT SHAFT LOCK PLATE DAMPER
DC1	1C	*	E30-4033-0	5	CONNECTOR AS
224 225 226 F1,2	2E 2F 2F 1C	*	F09-1211-0 F09-1212-1 F09-1213-0 F06-3026-0	3	SHEET SHEET SHEET FUSE(3A)
230 231 232 233 234	3D 1C 3C 2C 2D	*	G01-2040-0 G01-2078-0 G01-2370-0 G01-2525-0 G01-2632-2	4 4 4	EXTENSION SI TORSION COLI TORSION COLI TORSION COLI TORSION COLI
235 236 238 239 240	2C 2F 2E 2E 2F		G01-2633-0 G01-2645-0 G11-1585-0 G11-1586-0 G11-1589-0	4 4 4	COMPRESSION COMPRESSION CUSHION CUSHION CUSHION
241 242	2F 2F		G11-1590-01 G11-1591-01		CUSHION CUSHION
- - - -		* * *	H10-4430-0 H25-0329-0 H25-0337-0 H54-0015-0 H64-0019-0	4 4 4	POLYSTYRENE PROTECTION E PROTECTION E ITEM CARTON OUTER CARTON
244 245 246 249 250	3D 1F 2C 1F 3C	*	J19-4431-14 J19-4435-04 J19-4466-22 J21-7409-04 J31-1005-24	4 2 4	LEAD HOLDER LEAD HOLDER HOLDER MOUNTING HAR COLLAR







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Ref. No.	Address			Description	Desti- Re
参照番号	位 置	Parts 新	部品番号	部 品 名 / 規 格	nation mar 仕 向備
			Ki	RC-1054R	<del>                                     </del>
202 203 206 207 208	1 C 1 C 2 C 1 F 1 D	* *	A01-2565-01 A02-1421-01 A22-1212-11 A46-1213-01 A52-0655-02	METALLIC CABINET PLASTIC CABINET SUB PANEL REAR COVER TOP COVER	
CL1 PA1 RC1	2C 3F 1C	*	A53-1563-03 A64-0048-12 A70-0827-05	CASSETTE LID PANEL ASSY REMOTE CONTROLLER ASSY	
211 - - -	3E	* * *	B10-1543-03 B46-0100-20 B46-0608-04 B64-0245-00 B64-0246-00	FRONT GLASS WARRANTY CARD ID CARD INSTRUCTION MANUAL INSTRUCTION MANUAL	
- HL1	3C	*	B64-0247-00 B07-2036-02	INSTRUCTION MANUAL ESCUTCHEON ASSY	
213 214 215 216 217	3D 3D 2C 2C 1C	*	D10-2550-24 D10-2684-24 D10-2776-14 D10-2778-24 D21-1346-04	LEVER LEVER LEVER ASSY ARM SHAFT	
218 219 220 221	1C 2C 1C 2C	*	D21-1419-05 D21-2127-04 D32-0162-03 D39-0211-05	SHAFT SHAFT LOCK PLATE DAMPER	
DC1	1C	*	E30-4033-05	CONNECTOR ASSY	
224 225 226 F1 ,2	2E 2F 2F 1C	*	F09-1211-04 F09-1212-13 F09-1213-04 F06-3026-05	SHEET SHEET SHEET FUSE(3A)	
230 231 232 233 234	3D 1C 3C 2C 2D	*	G01-2040-04 G01-2078-04 G01-2370-04 G01-2525-04 G01-2632-24	EXTENSION SPRING TORSION COIL SPRING TORSION COIL SPRING TORSION COIL SPRING TORSION COIL SPRING	
235 236 238 239 240	2C 2F 2E 2E 2F		G01-2633-04 G01-2645-04 G11-1585-04 G11-1586-04 G11-1589-03	COMPRESSION SPRING COMPRESSION SPRING CUSHION CUSHION CUSHION CUSHION	
241 242	2F 2F		G11-1590-03 G11-1591-03	CUSHION CUSHION	
- - -		* * *	H10-4430-02 H25-0329-04 H25-0337-04 H54-0015-04 H64-0019-04	POLYSTYRENE FOAMED FIXTURE PROTECTION BAG (280X450X0.03) PROTECTION BAG (180X300X0.03) ITEM CARTON CASE OUTER CARTON CASE	
244 245 246 249 250	3D 1F 2C 1F 3C	*	J19-4431-14 J19-4435-04 J19-4466-22 J21-7409-04 J31-1005-24	LEAD HOLDER LEAD HOLDER HOLDER MOUNTING HARDWARE COLLAR	

E : Europe W : Without Europe P : Canada X : Australia

**K**: U.S.A. and Canada **M**: Without Europe, U.S.A. and Canada



# KHC-1054R

## **PARTS LIST**

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KRC-1054R

1	T	T			KRC-10
Ref. No.	Address	New Part	5	Description	Desti-
参照番号	位 置	新	部品番号	部品名/規格	nation m 仕 向 f
251 252	2C 1C		J52-0037-14 J54-0059-04	MAGNET CATCH STAY	
255 256 257 258 259	1 C 2 F 3 E 3 F 3 F		K01-0601-03 K24-1177-04 K24-1179-04 K24-1181-04 K24-1197-04	HANDLE KNOB (2, SCN) KNOB (4, REP) KNOB (6, M.RDM) KNOB (OPEN)	
260 261 262 263 264	2F 2F 2E 2F 2F		K24-1255-04 K24-1256-04 K24-1262-04 K24-1266-04 K24-1270-04	KNOB (>>  +) KNOB (-  <<) KNOB (ATT) KNOB (EJECT) KNOB (AUTO)	
265 266 267 268 269	2F 3F 3E 3F 3E		K24-1271-04 K24-1272-04 K24-1273-04 K24-1274-04 K24-1275-04	KNOB (1, B.CNR) KNOB (3, RDM) KNOB (5, D.S) KNOB (PRO) KNOB (LO.S)	
270 271 272 273 274	3E 3E 3F 2E 2E	* *	K24-1276-04 K24-1277-04 K24-1278-04 K24-1279-04 K24-1280-04	KNOB (-AM) KNOB (FM+) KNOB (RESET) KNOB (AUDIO) KNOB (ILLUM)	
275 276 277 278 279	2E 2F 2F 3F 3F	* * * *	K24-1281-04 K24-1282-04 K24-1284-04 K24-1286-04 K24-1287-04	KNOB (K2I) KNOB (RDS) KNOB (TI) KNOB (SRC) KNOB (DISP)	
280 281	2E 3C		K25-0624-04 K27-3510-04	KNOB (VOL) KNOB (LEVER)	
282 A B C D	1 C 3 C 1 C 1 C 3 C		N99-0277-05 N09-1492-05 N09-1822-05 N09-4002-05 N19-2002-05	SCREW SET MACHINE SCREW (2.6X3.5) STEPPED SCREW (2X3.5) STEPPED SCREW (M2.6X3) CORRUGATED WASHER	2
E F G H J	2C 3D 1C 2D 3C		N19-2022-04 N30-2004-46 N30-3004-46 N30-3005-46 N32-2008-45	FLAT WASHER PAN HEAD MACHINE SCREW PAN HEAD MACHINE SCREW PAN HEAD MACHINE SCREW FLAT HEAD MACHIN SCREW	
K M N	2C 2F 2C 1F 1C,3D		N80-2005-45 N80-2005-46 N80-2006-46 N80-2008-45 N83-3005-46	PAN HEAD TAPTITE SCREW	
₹	1 C		N89-2605-46	BINDING HEAD TAPTITE SCREW	
283	1 C	*	T94-0408-05	MAGNETIC PLUNGER	
A1	20		W09-0719-05	BATTERY	
E1	2C	*	X92-1710-09	MECHANISM ASSY	
				T (X09-5042-70)	
1 -4 5 -8			CC73FCH1H271J CC73FCH1H101J	CHIP C 270PF J CHIP C 100PF J	

# <RC-1054R</p>

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### **AUDIO UNIT (X09-5042-70)**

Ref. No.	Address		Parts No.	Description	Desti- Re- nation marks
参照番号	位 置	Parts 新	部品番号	部 品 名 / 規 格	仕 向 備考
09 ,10 011 ,12 013 014 016			CE04CW0J330M C91-2040-05 C90-2595-05 CE04CW1A101M CE04CW0J101M	ELECTRO 33UF 6.3WV CERAMIC 0.010UF Z ELECTRO 4.7UF 16WV ELECTRO 100UF 10WV ELECTRO 100UF 6.3WV	
C17 ,18 C19 ,20 C21 -24 C25 -28 C29 -34			C90-2536-05 C93-1044-05 C90-2532-05 CK73EB1E104K C93-1044-05	ELECTRO 10UF 16WV CERAMIC 2200PF K ELECTRO 1UF 16WV CHIP C 0.10UF K CERAMIC 2200PF K	
C35 C36 ,37 C38 ,39 C41 ,42 C43 -46			CE04CW1A220M CE04CW0J470M CE04CW0J220M C90-2535-05 CC73FCH1H271J	ELECTRO 22UF 10WV SLECTRO 47UF 6.3WV ELECTRO 22UF 6.3WV ELECTRO 4.7UF 16WV CHIP C 270PF J	
C47 ,48 C101,102 C103,104 C105,106 C107,108		41.0	CC73FSL1H102J CE04MW1C100M CE04MW1E4R7M CE04MW0J470M CK73FB1H152K	CHIP C 1000PF J ELECTRO 10UF 16WV ELECTRO 4.7UF 25WV ELECTRO 47UF 6.3WV CHIP C 1500PF K	
C109,110 C111,112 C113,114 C115-122 C123,124			CK73EB1E104K CE04MW1E4R7M CC73FSL1H102J CE04MW1E4R7M CE04MW1H2R2M	CHIP C 0.10UF K ELECTRØ 4.7UF 25WV CHIP C 1000PF J ELECTRØ 4.7UF 25WV ELECTRØ 2.2UF 50WV	
C125,126 C127,128 C129,130 C131,132 C133			CK73FB1E333KTA CK73FB1H123K CK73FB1H332K CK73FB1E333K CK73FB1H561K	CHIP C 0.033UF K CHIP C 0.012UF K CHIP C 3300PF K CHIP C 0.033UF K CHIP C 560PF K	
C134 C135 C137,138 C139-142 C143-146		*	CK73FB1H223KTA CK73EB1H103K CE04MW1C100M CE04MW1E4R7M C93-1050-05	CHIP C 0.022UF K CHIP C 0.01UF K ELECTRO 10UF 16WV ELECTRO 4.7UF 25WV CERAMIC CAPACITOR (TYPE 2)	
C147-150 C151-153 C154 C155,156 C163			CE04MW1C100M CK73FB1H103K CK73EB1H103K CK73FB1H103K CK73FB1H103K	ELECTRO 10UF 16WV CHIP C 0.010UF K CHIP C 0.01UF K CHIP C 0.010UF K CHIP C 0.010UF K	
C164			CK73EB1H103K	CHIP C 0.01UF K	
CN1 CN2 CN3 CN4 CN11			E40-9102-05 E40-9098-05 E40-5461-05 E40-3261-05 E40-9096-05	SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY PIN ASSY SOCKET FOR PIN ASSY	
CN12 CN13 TP1			E40-9091-05 E40-9095-05 E40-9218-05	SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY PIN ASSY	
R1 -4 R5 ,6 R7 ,8 R9 ,10 R11 ,12		k k	R92-2036-05 R92-2116-05 R92-2117-05 RK73FB2A334J R92-2035-05	CHIP R 18K D 1/1 METAL FILM RESISTOR METAL FILM RESISTOR CHIP R 330K J 1/1 CHIP R 12K D 1/1	

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### **AUDIO UNIT (X09-5042-70)**

		Parts No.	Description	n		Desti-	Re- marks
位 置	新	部品番号	部 品 名 / 券	格			備考
		RK73FB2A473J RK73FB2A103J RK73FB2A331J RK73FB2A473J RK73FB2A222J	CHIP R 47K CHIP R 10K CHIP R 330 CHIP R 47K CHIP R 2.2K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
		RK73FB2A332J R92-2026-05 R92-2038-05 RK73FB2A223J R92-2036-05	CHIP R 3.3K 560 CHIP R 22K CHIP R 22K CHIP R 18K	J D J D	1/10W 1/10W 1/10W 1/10W 1/10W		
		R92-2033-05 R92-2044-05 RK73FB2A103J R92-2028-05 R92-2029-05	CHIP RD R 5.1K 2.7K CHIP R 10K CHIP R 1K CHIP R 2.0K	D J D D	1/10W 1/10W 1/10W 1/10W 1/10W		
		R92-2032-05 RK73FB2A223J R92-2030-05 RK73FB2A472J RK73FB2A822J	CHIP R 4.7K CHIP R 22K CHIP R 2.2K CHIP R 4.7K CHIP R 4.7K CHIP R 8.2K	D D J J	1/10W 1/10W 1/10W 1/10W 1/10W		
		RK73FB2A204J RK73FB2A224J R92-2030-05 RK73FB2A224J RK73FB2A681J	CHIP R 200K CHIP R 220K CHIP R 2.2K CHIP R 220K CHIP R 680	J D J J	1/10W 1/10W 1/10W 1/10W 1/10W		
		RK73FB2A473J RK73FB2A471J RK73FB2A473J RK73FB2A471J RK73FB2A222J	CHIP R 47K CHIP R 470 CHIP R 47K CHIP R 470 CHIP R 2.2K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
	*	RK73EB2B103J RK73EB2B564J RK73FB2A224J R92-2028-05 R92-2024-05	CHIP R 10K CHIP R 560K CHIP R 220K CHIP R 1K METAL FILM RESISTOR	J J D	1/8W 1/8W 1/10W 1/10W		
		RK73FB2A223J RK73FB2A474J R92-2033-05 R92-2071-05 R12-3100-05	CHIP R 22K CHIP R 470K CHIP RD R 5.1K CHIP R 6.2K TRIMMING POT.(10K)	J J D	1/10W 1/10W 1/10W 1/10W		
		R92-2053-05	CHIP R O	J	1/8W		
	*	MA110 1SS355 ERA15-01 DAP202K TA2025F	DIODE DIODE DIODE IC				
		HA12161FP NJM4565MD TC9233FK NJM5532MD NJM4565MD	IC IC(OP AMP X2) IC IC(OP AMP) IC(OP AMP X2)				
		2SD1757K 2SD1757K	TRANSISTOR TRANSISTOR				
	_	位置 新	### ### ### ### ### ### ### ### ### ##	### ### ### ### ### ### ### ### ### ##	### ### ### ### ### ### ### ### ### ##	##  ##  ##  ##  ##  ##  ##  ##  ##  ##	本   本   本   本   本   本   本   本   本   本

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Ref. No.	Address		Parts No.	Description	Desti- Re- nation marks
参照番号	位 置	Parts 新	部品番号	部品名/規格	仕 向 備考
C9 ,10 C11 ,12 C13 C14 C16			CE04CW0J330M C91-2040-05 C90-2595-05 CE04CW1A101M CE04CW0J101M	ELECTRO 33UF 6.3WV CERAMIC 0.010UF Z ELECTRO 4.7UF 16WV ELECTRO 100UF 10WV ELECTRO 100UF 6.3WV	
C17 ,18 C19 ,20 C21 -24 C25 -28 C29 -34			C90-2536-05 C93-1044-05 C90-2532-05 CK73EB1E104K C93-1044-05	ELECTRO 10UF 16WV CERAMIC 2200PF K ELECTRO 1UF 16WV CHIP C 0.10UF K CERAMIC 2200PF K	
C35 C36 ,37 C38 ,39 C41 ,42 C43 -46			CE04CW1A220M CE04CW0J470M CE04CW0J220M C90-2535-05 CC73FCH1H271J	ELECTRO         22UF         10WV           SLECTRO         47UF         6.3WV           ELECTRO         22UF         6.3WV           ELECTRO         4.7UF         16WV           CHIP C         270PF         J	
C47 ,48 C101,102 C103,104 C105,106 C107,108			CC73FSL1H102J CE04MW1C100M CE04MW1E4R7M CE04MW0J470M CK73FB1H152K	CHIP C 1000PF J ELECTRO 10UF 16WV ELECTRO 4.7UF 25WV ELECTRO 47UF 6.3WV CHIP C 1500PF K	
C109,110 C111,112 C113,114 C115-122 C123,124			CK73EB1E104K CE04MW1E4R7M CC73FSL1H102J CE04MW1E4R7M CE04MW1H2R2M	CHIP C 0.10UF K ELECTRO 4.7UF 25WV CHIP C 1000PF J ELECTRO 4.7UF 25WV ELECTRO 2.2UF 50WV	
C125,126 C127,128 C129,130 C131,132 C133			CK73FB1E333KTA CK73FB1H123K CK73FB1H332K CK73EB1E333K CK73FB1H561K	CHIP C 0.033UF K CHIP C 0.012UF K CHIP C 3300PF K CHIP C 0.033UF K CHIP C 560PF K	
C134 C135 C137,138 C139-142 C143-146		*	CK73FB1H223KTA CK73EB1H103K CE04MW1C100M CE04MW1E4R7M C93-1050-05	CHIP C 0.022UF K CHIP C 0.01UF K ELECTRO 10UF 16WV ELECTRO 4.7UF 25WV CERAMIC CAPACITOR (TYPE 2)	
C147-150 C151-153 C154 C155,156 C163			CE04MW1C100M CK73FB1H103K CK73EB1H103K CK73FB1H103K CK73FB1H103K	ELECTR® 10UF 16WV CHIP C 0.010UF K CHIP C 0.01UF K CHIP C 0.010UF K CHIP C 0.010UF K	
C164			CK73EB1H103K	CHIP C 0.01UF K	
CN1 CN2 CN3 CN4 CN11			E40-9102-05 E40-9098-05 E40-5461-05 E40-3261-05 E40-9096-05	SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY PIN ASSY SOCKET FOR PIN ASSY	
CN12 CN13 TP1			E40-9091-05 E40-9095-05 E40-9218-05	SOCKET FOR PIN ASSY SOCKET FOR PIN ASSY PIN ASSY	
R1 -4 R5 ,6 R7 ,8 R9 ,10 R11 ,12			* R92-2036-05 R92-2116-05 R92-2117-05 RK73FB2A334J R92-2035-05	METAL FILM RESISTOR METAL FILM RESISTOR CHIP R 330K J 1/2	/10W /10W /10W

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Ref. No.	Addres	Parts		Parts		1		部		iption /規 林	<b>*</b>	Desti- nation 仕 向	Re- marks 備考
参照番号	位置	新	部		番						-		J
			5	SUB-	CIF	CUIT	UNIT (	X13-6					
:1	T		CF92	V1H2	24J		MF		0.	22UF	J		
			E40-	9100	0-05	5	SOCKE	T FOF	R PIN	ASSY			
CN1 CN2			E40-	5069	5-05	5	PIN A	SSY Carle	E CONN	ICTOR			
CN3 J1 ,2			E40-	805	2-05	5	LEAD	WIRE					
			S40-	114	0-09	5	PUSH						
S1 S2 -4			S46-	160	1-0	5	LEAF	SWIT	CH				
PH1 ,2			T95-	-020	1-0	5	0PT0	ISOL	ATOR				
PH3			T95	-020	2-0	5	OPTO	VIÓ	SEUS-	71)			
							UNIT (	V 19-		<del></del>			
D1 PL1 ,2		*	B30 B30	-139 -140	3-U 6-0	ວ 5	LAMP		1				
PLI ,2				-081			RECTA	NGUL	AR RE	CEPTACL	Æ		
CN1							1				ING BOARD		
FPC1	1C		J84	-003	37-C	13				PD 411/			
D2 -10			MA8	062-	- M		ZENE			70)			
							UNIT	(X14	1-5002	-701			
D502		1	B30	-140	)5-0	)5	LED						
C1		,	k C90	-27	91-0	)5   1 M	ALMI ELEC	NIUM	ELECT	ROLYTI	C C. 35WV		
C2	1		l ck7	4DW 3EB	1H1	34K	CHIP	С	C	.10UF	K		ļ
C3 ,4 C5 ,6			CK	3FB )4CW	1H1	03K	CHIP			).010UF 22UF	K 6.3₩V		
C7			1				1		(	).022UF	К		
C8			CK	73FB 73FC	1H2 H1H	23KTA 270J	CHIP	C		27PF	J		
C9 ,10 C11			CE	4CW	1A1	01M	CHIP			100UF 0.022UF	10WV K		
C13 ,14 C15			CK	/3FB 73EB	1H2	23KT <b>A</b> 83K	CHIP	Č		0.068UF			
			1			53KT <b>A</b>	CHIF	c		0.015UF			
C17 ,18 C19 ,20			l CK	73FE	1H3	32K	CHIE	, C		3300PF 0.082UF	K K		
C21 C22			CE	73EE 04CV	/1A1	01M	ELEC	CTRO		100UF 2.2UF	10₩V 35₩V		
C23			C9	0-25	25-	05		ELECT					l
C24			СК	73F	31H2	23KTA	CHI	2 C		0.022UF			
C25 C26			CK	13F1 04C1	01H1 01A1	103K 101M	ELE	CTRO		100UF 3300PF	10₩V J		
C27			l CF	92V	1H3	32J	MF	AMIC		0.015U			
C28										0.0220	F K		
C29 C30 ,31			1.00	:73F	SL1	223 <b>KTA</b> H102J	CHI	РC		1000PF 4.7UF			
C32 ,33		Ì	lo	90-2	595	-05 103K	CHI	CTRO P C		0.010U	F K		
C34 C35						102K	CHI	P C		1000PF	K		
C36	Ì		CI	E040	W1A	220M		CTRO		22UF 22UF	10WV 6.3WV		
C37			l c	E040	WOJ	220M	ELE	CTRO CTRO	) )	10UF	6.3WV		
C38 C39			l lc	90-2	606	-05	ELE	CTRO CTRO	)	0.47UF 2.2UF	50WV 6.3WV		
C40				92-0						_			
C41			c	93-0	025	-05	CEF	RAMIC	į	0.22UF	. 17		

**E**: Europe **W**: Without Europe **P**: Canada **X**: Australia **K**: U.S.A. and Canada **M**: Without Europe, U.S.A. and Canada

# KRC-1054F

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### SYNTHESIZER UNIT (X14-5002-70)

Ref. No.	Address		Parts No.		De	scription		Desti-	Re-
参照番号	位 置	Parts 新	部品番号	部	品	名/規	格	nation 仕 向	mark: 備考
C42 C43 C44 C45 C46 ,47			CK73EB1E563K CK73FB1H103K CK73FB1H102K CC73FCH1H270J C90-2592-05	CHIP C CHIP C CHIP C CHIP C ELECTRO		0.056UF 0.010UF 1000PF 27PF 10UF	K K K J 6.3WV		
C48 C49,50 C51 C52 C53			C92-0005-05 CK73FB1H103K CK73FB1H561K CC73FCH1H820J CC73FCH1H470J	ELECTRO CHIP C CHIP C CHIP C CHIP C		2.2UF 0.010UF 560PF 82PF 47PF	6.3WV K K J J		
C54 C55 ,56 C57 C58 C59 ,60			CE04CW0J220M CK73FB1H223KTA CE04CW1C470M CK73FB1H223KTA CK73FB1H103K	ELECTRO CHIP C ELECTRO CHIP C CHIP C		22UF 0.022UF 47UF 0.022UF 0.010UF	6.3WV K 16WV K K		
C61 ,62 C63 C64 C65 C66			C93-0025-05 CK73FB1H223KTA CE04MW1A101M C90-2608-05 CK73FB1H223KTA	CERAMIC CHIP C ELECTRO ELECTRO CHIP C		0.22UF 0.022UF 100UF 1.0UF 0.022UF	K K 10WV 50WV K		
C67 C69 C70 C71 C72			CK73FB1H103K CK73FB1E473KTA C90-2594-05 C90-2592-05 CK73EB1E104K	CHIP C CHIP C ELECTRO ELECTRO CHIP C		0.010UF 0.047UF 10UF 10UF 0.10UF	K K 10WV 6.3WV K		
C73 C98 C100,101 C102 C103			CK73FB1H103K CK73FB1H103K CK73FB1H103K CE04CW0J220M CK73FB1H223KTA	CHIP C CHIP C CHIP C ELECTRO CHIP C		0.010UF 0.010UF 0.010UF 22UF 0.022UF	K K K 6.3WV K		
C104 C105 C106,107 C108 C109			C90-2608-05 C93-0025-05 CC73FCH1H100D C90-1263-05 CK73FB1H223KTA	ELECTRO CERAMIC CHIP C ELECTRO CHIP C		1.0UF 0.22UF 10PF 100UF 0.022UF	50WV K D 16WV K		
C111 C112 C114 C115 C116		T T T T T T T T T T T T T T T T T T T	CK73FB1H223KTA CK73FB1H103K CK73FB1H223KTA CK73FB1H103K CE04CW0J470M	CHIP C CHIP C CHIP C CHIP C ELECTRO		0.022UF 0.010UF 0.022UF 0.010UF 47UF	K K K K 6.3WV		
C117 C118 C119 C120,121 C501			CK73FB1H331K CK73FB1E333KTA CK73FB1H102K CK73FB1H103K CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C		330PF 0.033UF 1000PF 0.010UF 0.010UF	K K K K K		
C502 C503 C504 C505 C506			C92-0005-05 CK73FB1H103K CK73FB1H182K CK73FB1H103K CE04DW1A101M	ELECTRO CHIP C CHIP C CHIP C ELECTRO		2.2UF 0.010UF 1800PF 0.010UF 100UF	6.3WV K K K 10WV		
C507 C508 C509 C510 C511			CK73FB1H223KTA CC73FCH1H070D CK73EB1E104K CK73EB1E823K C92-0005-05	CHIP C CHIP C CHIP C CHIP C ELECTRO		0.022UF 7PF 0.10UF 0.082UF 2.2UF	K D K K 6.3WV		

### **PARTS LIST**

\* New Parts

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### SYNTHESIZER UNIT (X14-5002-70)

Ref. No.	Address		Parts No.	Description Desti- nation	
参照番号	位 置	Parts 新	部品番号		marks
C512 C513 C514 C515 C516			CK73EB1H223K CC73FCH1H101J CK73FB1H471K C92-0005-05 CK73EB1E104K	CHIP C 0.022UF K CHIP C 100PF J CHIP C 470PF K ELECTRO 2.2UF 6.3WV CHIP C 0.10UF K	
C517 C518 C519 C520 C521			C92-0004-05 C92-0003-05 CE04NW1A101M CK73EB1E473K CK73EB1E104K	ELECTRO	
C522,523 C524 C525,526 C527 C528			CE04NW1C100M CK73EB1E473K CK73EB1E104K CK73FB1H222K CK73FB1H472K	BLECTRO	
C529 C530 C531,532 C533 C534			CK73EB1E104K CK73FB1E473KTA CK73EB1E104K CK73FB1H102K CK73FB1H103K	CHIP C 0.10UF K CHIP C 0.047UF K CHIP C 0.10UF K CHIP C 1000PF K CHIP C 0.010UF K	
CN1 CN2 CN3 CN4 CN5		* *	E40-9249-05 E40-9085-05 E40-9083-05 E40-9079-05 E40-9077-05	FLAT CABLE CONNCTOR PIN ASSY PIN ASSY PIN ASSY PIN ASSY PIN ASSY	
CN6 CN50 CN51 CN52 CN53,54		*	E40-9072-05 E40-9104-05 E40-5452-05 E40-9081-05 E40-9076-05	PIN ASSY SOCKET FOR PIN ASSY PIN ASSY PIN ASSY PIN ASSY	
TP1 TP2 WH2			E40-3445-15 E23-0136-05 E31-8202-05	SOCKET FOR PIN ASSY TERMINAL WIRING HARNESS	
LH1			J19-2826-05	HOLDER	
CF1 CF2 CF3 L1 L2		*	L72-0716-05 L72-0715-05 L72-0721-05 L40-4791-31 L40-4791-16	CERAMIC FILTER CERAMIC FILTER CERAMIC FILTER SMALL FIXED INDUCTOR(4.7UH) SMALL FIXED INDUCTOR(4.7UH,K)	
L3 L4 ,5 L6 L7 L8 ,9			L40-5681-17 L40-4791-31 L40-4791-11 L40-1011-31 L40-4791-31	SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR(4.7UH) SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR(100UH) SMALL FIXED INDUCTOR(4.7UH)	
L14 L501 L502 T1 X1			L40-4791-31 L40-1021-14 L40-4791-31 L30-0462-15 L77-1166-05	SMALL FIXED INDUCTOR(4.7UH) SMALL FIXED INDUCTOR(1.0MH,K) SMALL FIXED INDUCTOR(4.7UH) FM IFT CRYSTAL RESONATOR	
X2 X3 X4 X5 X11		*	L77-2002-05 L78-0503-05 L77-2003-05 L78-0267-05 L78-0526-05	CRYSTAL RESONATOR(4.3320MHZ) RESONATOR (4.00MHZ) CRYSTAL RESONATOR(8.388608MHZ) RESONATOR (4.19MHZ) RESONATOR	

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### SYNTHESIZER UNIT (X14-5002-70)

Ref. No.	Address Nev	Parts No.	STATILESIZER OINT (	
参照番号	Part 位置新	s	Description 部 品 名 / 規 格	Desti- Re- nation mark 仕 向 備考
H R S	2D 2D 2D	N30-3005-46 N83-3006-45 N83-3008-46	PAN HEAD MACHINE SCREW PAN HEAD TAPTITE SCREW PAN HEAD TAPTITE SCREW	
R1 -4 R5 ,6 R7 R8 R9 ,10		RK73FB2A223J RK73FB2A183J RK73FB2A392J RK73FB2A222J RK73FB2A472J	CHIP R 22K J 1/10W CHIP R 18K J 1/10W CHIP R 3.9K J 1/10W CHIP R 2.2K J 1/10W CHIP R 4.7K J 1/10W	
R11 ,12 R13 R14 R15 R16		RK73FB2A104J RK73FB2A152J RK73FB2A431J RK73FB2A330J RK73FB2A271J	CHIP R 100K J 1/10W CHIP R 1.5K J 1/10W CHIP R 430 J 1/10W CHIP R 33 J 1/10W CHIP R 270 J 1/10W	
R17 ,18 R19 -21 R22 ,23 R24 -26 R27		RK73FB2A331J RK73FB2A102J RK73FB2A222J RK73FB2A472J RK73FB2A331J	CHIP R 330 J 1/10W CHIP R 1.0K J 1/10W CHIP R 2.2K J 1/10W CHIP R 4.7K J 1/10W CHIP R 330 J 1/10W	
R28 R29 R30 ,31 R32 ,33 R34		RK73FB2A183J RK73FB2A102J RK73FB2A103J RK73FB2A222J RK73EB2B100J	CHIP R 18K J 1/10W CHIP R 1.0K J 1/10W CHIP R 10K J 1/10W CHIP R 2.2K J 1/10W CHIP R 10 J 1/8W	
R35 ,36 R37 ,38 R39 R40 R41		RK73FB2A752J RK73FB2A472J RK73FB2A912J RK73FB2A223J RK73FB2A102J	CHIP R 7.5K J 1/10W CHIP R 4.7K J 1/10W CHIP R 9.1K J 1/10W CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W	
R42 R43 R44 R45 R47		RK73FB2A222J RK73FB2A332J RK73FB2A272J RK73FB2A331J RK73FB2A432J	CHIP R 2.2K J 1/10W CHIP R 3.3K J 1/10W CHIP R 2.7K J 1/10W CHIP R 330 J 1/10W CHIP R 4.3K J 1/10W	
R48 R50 R51 R52 R54		RK73FB2A153J RK73FB2A113J RK73FB2A562J RK73FB2A223J RK73FB2A470J	CHIP R 15K J 1/10W CHIP R 11K J 1/10W CHIP R 5.6K J 1/10W CHIP R 22K J 1/10W CHIP R 47 J 1/10W	
R55 R56 R57,58 R59,60 R61,62		RK73FB2A331J RK73FB2A221J R92-2030-05 R92-2034-05 RK73FB2A103J	CHIP R 330 J 1/10W CHIP R 220 J 1/10W CHIP R 2.2K D 1/10W CHIP R 10K D 1/10W CHIP R 10K J 1/10W	
R63 R64 R65 R66 R67		RK73FB2A223J RK73FB2A104J RK73FB2A100J RK73FB2A102J RK73FB2A103J	CHIP R 22K J 1/10W CHIP R 100K J 1/10W CHIP R 10 J 1/10W CHIP R 1.0K J 1/10W CHIP R 1.0K J 1/10W CHIP R 10K J 1/10W	
R68 R69 R70 ,71 R72 R73		RK73FB2A223J RK73FB2A473J RK73FB2A223J RK73FB2A222J RK73FB2A102J	CHIP R 22K J 1/10W CHIP R 47K J 1/10W CHIP R 22K J 1/10W CHIP R 2.2K J 1/10W CHIP R 1.0K J 1/10W	
R74 ,75		RK73FB2A103J	CHIP R 10K J 1/10W	

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### SYNTHESIZER UNIT (X14-5002-70)

Ref. No. A	ddress	New Parts	Р	arts	No.		escription			nation	Re- marks
参照番号 位	立 置	新	部	品	番号	部品	名 / 規	格		仕 向	備考
276 277 278 279			RK73F RK73F RK73F RK73F RK73F	B2# B2# B2#	473J 4303J 4823J	CHIP R CHIP R CHIP R CHIP R CHIP R	4.7K 47K 30K 82K 100	] ] ]	1/10W 1/10W 1/10W 1/10W 1/8W		
R81 ,82 R83 R84 R85			RK731	B21 B21 B21	A223J A224J A392J A304J A332J	CHIP R CHIP R CHIP R CHIP R CHIP R	22K 220K 3.9K 300K 3.3K	Ј Ј Ј Ј	1/10W 1/10W 1/10W 1/10W 1/10W		
R87 R88 R89 R90 ,91			RK73 RK73 RK73	FB2 FB2 FB2	A473J A102J A100J A102J D330J	CHIP R CHIP R CHIP R CHIP R FL-PROOF RS	47K 1.0K 10 1.0K 33	J J J	1/10W 1/10W 1/10W 1/10W 2W		
R96 R97 R98 -106 R107 R108			RK73 RK73 R92-	FB2 FB2 211	A222J A332J A104J 7-05 3-05	CHIP R CHIP R CHIP R METAL FILM F CHIP RD R	2.2K 3.3K 100K RESIST®R 5.1K	J J D	1/10W 1/10W 1/10W		
R109 R110 R111 R112 R113			RK73 R92- RK73	FB2 -210 FB2	A101J A181J A-05 A222J A-05	CHIP R CHIP R CHIP R CHIP R CHIP R	100 180 2.2 2.2K 2.2	J J J	1/10W 1/10W 1W 1/10W 1W		
R114,115 R116 R117-119 R147 R148-150			RK73 RK73	3FB2 3FB2 3FB2	2A103J 2A471J 2A472J 2A123J 2A103J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 470 4.7K 12K 10K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R151-155 R156,157 R158 R159-166 R167	Ì		RK7	3FB: 3FB: 3FB:	2A104J 2A473J 2A103J 2A101J 2B181J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 47K 10K 100 180	J J J J	1/10W 1/10W 1/10W 1/10W 1/8W	1	
R168 R169 R170 R171 R172			RK7 RK7 R92	3FB 3FB -03	2A103J 2A223J 2A472J 65-05 2B103J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 22K 4.7K 1K 10K	J J J	1/10	1	
R173-176 R177,178 R179 R180 R181,182			RK7	3FB 3FB	2A104J 2A134J 2A103J 2A431J 2A471J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 130K 10K 430 470	J J J	1/10 1/10 1/10	₩ ₩	
R183,184 R185,186 R187,188 R189 R191			RK7	73FE 73FE 73FE	86-05 2A103J 32A102J 32A182J 32A104J	CHIP R CHIP R CHIP R CHIP R	33 10K 1.0K 1.8K 100K	Ј Ј Ј Ј	1/10 1/10 1/10 1/10	w w w	
R193 R198,199 R200-202 R203 R204			RK'	73FE 73FE 73FE	82A104J 82A102J 82A103J 82A104J 82A223J	CHIP R CHIP R CHIP R CHIP R	100K 1.0K 10K 100K 22K	J J J	1/10 1/10 1/10	W   .	

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### SYNTHESIZER UNIT (X14-5002-70)

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Ref. No.	Address	Parts				Description				Re- marks
参照番号	位置	新	部品番号	1	部	品名/規	格		仕 向	備考
R205 R206,207 R208 R209-211 R212-215			RK73FB2A103J RK73FB2A472J RK73FB2A222J RK73FB2A102J RK73FB2A222J	CHIP R CHIP R CHIP R CHIP R CHIP R		10K 4.7K 2.2K 1.0K 2.2K	J J J J	1/10W		
R216 R217,218 R219 R220,221 R222			RK73FB2A472J RK73FB2A222J RK73FB2A472J RK73FB2A222J RK73FB2A102J	CHIP R CHIP R CHIP R CHIP R		4.7K 2.2K 4.7K 2.2K 1.0K	J J J J	1/10W		
R223-227 R228 R229 R230-234 R235-238			RK73FB2A222J RK73FB2A472J RK73FB2A222J RK73FB2A102J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R CHIP R		2.2K 4.7K 2.2K 1.0K 4.7K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R239-255 R256 R257,258 R259 R260			RK73FB2A222J RK73FB2A562J RK73FB2A222J RK73FB2A103J RK73FB2A222J	CHIP R CHIP R CHIP R CHIP R CHIP R		2.2K 5.6K 2.2K 10K 2.2K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R261 R262 R263 R264-271 R272			RK73FB2A102J RK73FB2A222J RK73FB2A472J RK73FB2A222J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R		1.0K 2.2K 4.7K 2.2K 4.7K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R273-275 R276 R277,278 R279-284 R286			RK73FB2A222J RK73EB2B272J RK73FB2A272J RK73FB2A104J RK73FB2A104J	CHIP R CHIP R CHIP R CHIP R CHIP R		2.2K 2.7K 2.7K 100K 100K	J J J J	1/10W 1/8W 1/10W 1/10W 1/10W		
R288 R289 R290 R291 R292			RK73FB2A473J RK73FB2A222J RK73FB2A102J RK73FB2A222J RK73EB2B220J	CHIP R CHIP R CHIP R CHIP R		47K 2.2K 1.0K 2.2K 22	J J J J	1/10W 1/10W 1/10W 1/10W 1/8W		
R293-295 R296 R297 R299-307 R308-310			RK73FB2A222J RK73EB2B333J RK73EB2B222J RK73FB2A222J RK73EB2B222J	CHIP R CHIP R CHIP R CHIP R		2.2K 33K 2.2K 2.2K 2.2K	J J J J	1/10W 1/8W 1/8W 1/10W 1/8W		
R311-316 R317 R318 R319-327 R329			RK73FB2A222J RK73FB2A472J RK73FB2A222J RK73FB2A104J RK73FB2A512J	CHIP R CHIP R CHIP R CHIP R CHIP R		2.2K 4.7K 2.2K 100K 5.1K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R331 R332 R350 R376 R377			RK73FB2A471J RK73FB2A222J RK73FB2A222J RK73FB2A104J RK73FB2A102J	CHIP R CHIP R CHIP R CHIP R CHIP R		470 2.2K 2.2K 100K 1.0K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W		
R378 R501 R502 R505,506 R507			RK73FB2A104J RK73FB2A391J RK73FB2A225J RK73FB2A183J RK73FB2A511J	CHIP R CHIP R CHIP R CHIP R CHIP R		100K 390 2.2M 18K 510	J J J	1/10W 1/10W 1/10W 1/10W 1/10W		

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Ref. No.	Address		Par	ts No.	Description	Desti- Re- nation mark
参照番号	位 置	Parts 新	部品	品番号	部品名/規格	仕 向 備考
508 509 510 511,512			RK73FB RK73FB RK73FB RK73FB RK73FB	2A332J 2A563J 2A103J	CHIP R 3.3K J 1/ CHIP R 56K J 1/ CHIP R 10K J 1/	/10W /10W /10W /10W /10W
R515 R516 R517 R518 R519				2A562J	CHIP R 5.6K J 1/ CHIP R 330K J 1/ CHIP R 1.2K J 1/	/10W /10W /10W /10W /10W
R520 R521 R522 R523 R524			RK73FB RK73FB RK73FB	2A102J 2A683J 2A223J 32A242J 32A224J	CHIP R 68K J 1/ CHIP R 22K J 1/ CHIP R 2.4K J 1/	/10W /10W /10W /10W /10W
R525,526 R527 R528 VR1 VR2 ,3			RK73FE RK73FE R12-06	82A104J 82A823J 82A274J 806-05 885-05	CHIP R 82K J 1.	/10W /10W /10W
VR11 VR12 VR13 VR14 VR15			R12-3 R12-3 R12-3	685-05 103-05 100-05 101-05 685-05	TRIMMING POT. (10K) TRIM POT. 47K TRIMMING POT. (10K) TRIMMING POT. (22K) TRIMMING POT. (10K)	
W11 W45				052-05 052-05		/10W /10W
S1 S2	2D 2D			140-05 139-05	PUSH SWITCH (TPC) PUSH SWITCH (TDF)	
D1 ,2 D3 D3 D4 D5			MA806 MA110 1SS35 DAP20 DAN20	5 2K	ZENER DIODE DIODE DIODE DIODE DIODE	
D6 D7 D8 -11 D8 -11 D12			DAP204 DA204 MA110 1SS35 MA809	K ) 55	DIODE DIODE DIODE DIODE ZENER DIODE	
D13 D14,15 D14,15 D16 D17			MA805 MA110 1SS35 MA811 MA805	) 55 10-L	ZENER DIODE DIODE DIODE ZENER DIODE ZENER DIODE	
D18 D19 -22 D19 -22 D24 D25			DA204 MA110 1SS35 DAN20 DAP20	0 55 02K	DIODE DIODE DIODE DIODE DIODE	
D26 -28 D26 -28 D29 D30 D31				55	DIODE DIODE DIODE ZENER DIODE ZENER DIODE	

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### SYNTHESIZER UNIT (X14-5002-70)

	A		OTTATILEDIZER ONT	700270
Ref. No. 参照番号	Address New Part	ts .	Description	Desti- Re- nation marks
D32 D32 D33 D34 -39 D34 -39	位置新	MA110 1SS355 SD184-1 MA110 1SS355	部品名/規格 DIODE DIODE DIODE DIODE DIODE DIODE DIODE	仕 向 備考
D40 D49 D501 D501 IC1		MA8062-M DA204K MA110 1SS355 LC7218M	ZENER DIODE DIODE DIODE DIODE LC(PLL FREQUENCY SYNTHESIZER)	
IC2 IC3 IC4 IC5 IC6	. *	TC4W66F NJM5532MD NJM4565MD SAA6579T LC6543H-4600	IC IC(OP AMP) IC(OP AMP X2) IC IC	
IC7 IC8 IC9 IC9 IC10	*	TA7291P LC3564QM-10 LH5168H1 TC74HC573AF	CUSTOM IC IC(MOTOR DRIVER) IC IC IC IC(LATCH)	
IC11 IC12 IC15 IC16 IC17	*	M5237ML PST572HMT SN74HC367ANS M38067M8D094FP 75004GB-864-3B4	IC(VOLTAGE REGULATOR) IC IC IC IC IC	
IC51 IC52 Q1 ,2 Q3 ,4 Q5	*	KKC04 TA75S393F 2SC2412K 2SC2413K DTA124EK	CUSTOM IC IC TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
Q5 Q6 Q6 Q7 Q8 ,9		XDA124EK DTC124EK XDC124EK DTA144EK 2SA1428	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	
Q10 Q12 Q12 Q13 Q14		2SK536 DTC144EK XDC144EK 2SA1037K 2SK536	FET DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR FET	
Q15 -17 Q18 Q19 Q20 Q20		2SC2412K 2SA1037K 2SC2412K DTC144EK XDC144EK	TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q21 Q22 -24 Q22 -24 Q25 Q25		DTA144EK DTC144EK XDC144EK DTA124EK XDA124EK	DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q26 Q27 Q27 Q28 Q29		2SC2412K DTC144EK XDC144EK DTB123YK 2SC2412K	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	

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Ref. No.	Address New		Description	Desti- Re-
参照番号	位置 新	部品番号	部品名/規格	仕 向備者
Q30 Q31 ,32 Q31 ,32 Q33 Q34		2SA1408(0) DTC124EK XDC124EK 2SB1370F8 DTA114EK	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
Q35 Q36 Q37 Q38 Q38		2SB1370F8 2SC2412K DTA114EK DTC144EK XDC144EK	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q39 Q40 Q41 Q42 Q42		2SB1370F8 2SC2412K DTB123YK DTC144EK XDC144EK	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q43 Q44 Q45 -47 Q51 Q51		2SA1036K 2SC2412K 2SA1037K DTC144EK XDC144EK	TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q52 -55 Q52 -55 Q56 Q56 Q57		DTA124EK XDA124EK DTC124EK XDC124EK DTC144EK	DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
Q57 Q58 Q59 Q60 Q60		XDC144EK 2SC2412K 2SA1037K DTC124EK XDC124EK	TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q61 Q61 Q62 Q63 Q64 ,65		DTA124EK XDA124EK 2SA1428 DTC114EK 2SC2412K	DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q66 ,67 Q68 ,69 Q70 ,71 Q70 ,71 Q72		2SA1428 DTD123YK DTC144EK XDC144EK DTA144EK	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
Q73 Q74 Q75 Q75 Q76		2SC2411K DTA144EK DTC124EK XDC124EK DTA144EK	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
Q77 Q77 Q78 Q78 Q79		DTC144EK XDC144EK DTC124EK XDC124EK ZSC2412K	DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	
Q80 Q502 Q503 Q505		2SC2411K DTA144EK 2SC2412K 2SC2412K	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	

E : EuropeW : Without EuropeP : CanadaX : AustraliaK : U.S.A. and CanadaM : Without Europe, U.S.A. and Canada

## **PARTS LIST**

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

### SYNTHESIZER UNIT (X14-5002-70)

Ref. No.	Address			No.		Description		Desti-	Re-
参照番号	位 置	Parts 新	部品和	<b>新</b> 号	部	品名/規	格	nation	mark: 備考
TU1	1 D	*	W02-1398-	05	FM/AM FRONT	Γ-END			
					IIT (X25-7042				L
294 295 D1 -13 LCD1 PL1	1E 2E 2E	*	B11-0850- B19-0936- B30-1349- B38-0587- B30-1306-	04 05 05	OPTICAL DIF LIGHTING BO LED LIQUID CRYS LAMP	DARD Stal	.125A)		
PL2 ,3 PL4			B30-1305- B30-1306-		LAMP LAMP	(5.5V (5.5V	.125A) .125A)		
C1 C2 C3 C4 C5 ,6			CK73EB1H1 CK73EB1H6 CK73EB1H1 CK73EB1H6 CC73FCH1H	81K 03K 81K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.01UF 680PF 0.01UF 680PF 22PF	К К К К Ј		!
C7 C8 C9 C10			C92-0005-0 C92-0509-0 C92-0005-0 C92-0004-0	05 05	ELECTRO TANTAL ELECTRO ELECTRO	2.2UF 10UF 2.2UF 1.0UF	6.3WV 6.3WV 6.3WV 16WV		
296 CN1	2E		E29-1399-0 E59-0809-0		CONDUCTIVE RECTANGULAR	RUBBER PLUG			
297	2E		J19-4492-1	13	HOLDER				
X1			L78-0505-0	)5	RESONATOR				
R1 -4 R5 R6 ,7 R8 ,9 R10 ,11		1000	RK73FB2A10 RK73EB2B33 RK73EB2B47 RK73EB2B51 RK73FB2A10	31J 71J 3J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.0K 330 470 51K 100K	J 1/10W J 1/8W J 1/8W J 1/8W J 1/10W		
R12 R13 ,14 R15 -19 R20 ,21 R22 -24			RK73EB2B10 RK73FB2A10 RK73FB2A10 RK73EB2B10 RK73FB2A10	04J 02J 02J	CHIP R CHIP R CHIP R CHIP R CHIP R	100K 100K 1.0K 1.0K 1.0K	J 1/8W J 1/10W J 1/10W J 1/8W J 1/10W		
R25 R26 R27 R28 R29			RK73EB2B10 RK73FB2A10 RK73FB2A47 RK73FB2A10 RK73EB2B47	13J 12J 11J	CHIP R CHIP R CHIP R CHIP R CHIP R	10K 10K 4.7K 100 4.7K	J 1/8W J 1/10W J 1/10W J 1/10W J 1/8W		
R30 R31 -33 R34 R35 R36			RK73EB2B47 RK73EB2B33 RK73EB2B47 RK73EB2B33 RK73EB2B47	1J 1J 1J	CHIP R CHIP R CHIP R CHIP R CHIP R	470 330 470 330 470	J 1/8W J 1/8W J 1/8W J 1/8W J 1/8W		
R39 R40 -42 R43			RK73FB2A10 RK73EB2B10 RK73FB2A10	2J	CHIP R CHIP R CHIP R	1.0K 1.0K 1.0K	J 1/10W J 1/8W J 1/10W		
S1 ,2 S3 ,4 S5 -10 S11 S13 -21			S40-1601-1 S40-1606-0 S40-1601-1 S40-1606-0 S40-1606-0	5 5 5	PUSH SWITCH PUSH SWITCH PUSH SWITCH PUSH SWITCH PUSH SWITCH				
522 -25			S40-1601-1	5	PUSH SWITCH				

## **PARTS LIST**

× New Parts

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Teile ohne Parts No. werden nicht geliefert.

### **SWITCH UNIT (X25-7042-70)**

Ref. No.	Address		Parts No.	Description	Desti- Re- nation mark
参照番号	位置	Parts 新	部品番号	部品名/規格	仕 向 備考
526		*	S70-0814-05	TACT SWITCH	
D14 -22 D24 -28 IC1 IC2 IC3			MA8062-M MA8062-M 75004GB-863-3B4 PST572DMT RS-21	ZENER DIODE ZENER DIODE IC IC(SYSTEM RESET) IC	
IC4 ,5 Q1 Q2 Q2			LC7582E DTA143XK DTC144EK XDC144EK	IC(LCD DRIVER) DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
42				JNIT (X89-2002-70)	
C1 C2 C3 C4 -6 C7			CK73EB1H104K CK73EB1H683K C90-2598-05 CK73FB1H223KTA CE04DW1C100M	CHIP C 0.10UF K CHIP C 0.068UF K ELECTRO 3.3UF 25WV CHIP C 0.022UF K ELECTRO 10UF 16WV	
C8 ,9 C10 ,11 C12 C13 ,14 C15 ,16			CK73FB1E473KTA CK73FB1H223KTA CE04DW1A22OM CE04DW1E4R7M CK73FB1H822K	CHIP C 0.047UF K CHIP C 0.022UF K ELECTRO 22UF 10WV ELECTRO 4.7UF 25WV CHIF C 8200PF K	
C17 C18 C19 ,20 C21 ,22 C23 ,24			CC73FSL1H101J CK73FB1H221K CE04DW1A101M C93-0025-05 CE04DW1A470M	CHIP C 100PF J CHIP C 220PF K ELECTRO 100UF 10WV CERAMIC 0.22UF K ELECTRO 47UF 10WV	
C25 ,26 C27 C28 C29 ,30 C31 ,32			CK73FB1H223KTA C90-2673-05 C90-2530-05 CK73FB1H223KTA C90-2530-05	CHIP C 0.022UF K ELECTRO 220UF 10WV ELECTRO 47UF 16WV CHIP C 0.022UF K ELECTRO 47UF 16WV	
C33 ,34			CK73FB1H223KTA	CHIP C 0.022UF K	
CN1 CN2 CN3 CN4 CN5	2D	* *	E08-5001-05 E40-9199-05 E40-9235-05 E40-9236-05 E40-9095-05	RECTANGULAR RECEPTACLE PIN ASSY PIN ASSY PIN ASSY SOCKET FOR PIN ASSY	
WH1		*	E39-0012-05	WIRING HARNESS	
L1 L2 -4			L40-1001-16 L40-4701-12	SMALL FIXED INDUCTOR(10UH,K) SMALL FIXED INDUCTOR	
T	2 D		N80-2005-45	PAN HEAD TAPTITE SCREW	
R1 R2 R3 R4 R5			R92-0366-05 RK73FB2A223J R92-0365-05 RK73FB2A472J RK73FB2A103J	CHIP R 560 J 1W CHIP R 22K J 1/10 CHIP R 1K J 1/2W CHIP R 4.7K J 1/10 CHIP R 10K J 1/10	W
R7 R8 R9 ,10 R11 -14 R15			RK73FB2A224J RK73FB2A331J RK73FB2A102J RS14KB3D121J RK73FB2A331J	CHIP R 220K J 1/10 CHIP R 330 J 1/10 CHIP R 1.0K J 1/10 FL-PROOF RS 120 J 2W CHIP R 330 J 1/10	W

# KRC-1054F

### **PARTS LIST**

\* New Parts

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Teile ohne Parts No. werden nicht geliefert.

### **DAUGHTER UNIT (X89-2002-70)**

Ref. No.	Address	New	Parts	No			• . •				L
多照番号	1	Parts 新		番 号			escription				Re-
39 M M 7		#/	ар ин	<b>T</b> 7		<b>副</b>	名 / 規 ————	ff:		仕 向	備考
R16 R17			RK73FB2A RK73FB2A		CHIP R CHIP R		1.0K 4.7K	J J	1/10W 1/10W		
R18 R19 ,20			RK73FB2A RK73FB2A	103J	CHIP R		10K 1.5K	J J	1/10W		
R21 ,22			RK73FB2A		CHIP R		1.0K	J	1/10W 1/10W		
R23 ,24 R25			RK73FB2A RK73FB2A		CHIP R		33K	J	1/10W		
R26			RK73FB2A	223J	CHIP R		47K 22K	J J	1/10W 1/10W		
R27 ,28 R29 -32			RK73FB2A RK73FB2A		CHIP R CHIP R		47K 4.7K	J J	1/10W 1/10W		
R33			RK73FB2A		CHIP R		68K	J	1/10W		
R34 R36 ,37			RK73FB2A RK73FB2A		CHIP R CHIP R		1.0K 10K	J J	1/10W 1/10W		
D1 -3 D5			ERA15-01		DIODE						
D5			MA110 1SS355		DIODE DIODE						
D6 D7			ERA15-01 DAP202K		DIØDE DIØDE						
D8			DAN202K		DIODE						
D9 IC1 ,2			DA204K NJM4565D		DIODE IC(OP AM	IP X2	)				
IC3 IC4			TA79L005 TA78L005		IC(VOLTA IC(VOLTA	GE RE	EGULATOR EGULATOR	/ -5 / +5	V) V)		
Q1 Q1			DTA124EK		DIGITAL		SISTOR				
Q2			XDA124EK 2SA1037K		TRANSIST TRANSIST	.ØB					
Q3 Q4			2SB1277 DTC114EK		TRANSIST DIGITAL		SIST <b>o</b> r				
<b>Q</b> 5			2SD1266B		TRANSIST						
Q6 Q7			2SC2412K 2SD1266B		TRANSIST TRANSIST	ØR					
Q8 ,9			2SC2412K		TRANSIST						
DD1			W02-1335 MECH		ELECTRIC ASS'Y (X9			ULE			
3 5	2B		A11-0801	-52	SUB CHAS	SIS (	ALKING A	ASSY			
7	1A,2A 2A		A11-0858 B09-0504		SUB CHAS	212 (	ALKING A	ASSY			
8					CAP	1.00	,				
14	3A 1A		D01-0601 D10-2505	-13	FLYWHEEL ARM ASSY		(				
16 21	1B 1B		D10-2507 D10-2512	-13	ARM ASSY ARM					S	
23	2A		D10-2514		ARM						
24 26	3A 3B		D10-2515 D10-2517	-53	ARM ASSY LEVER						
27 28	2B 1B		D10-2518- D10-2519-		LEVER ARM ASSY						
30	1B		D10-2521		LEVER						
31 34	2A 3A		D13-1001- D13-1004-	-24	GEAR ASS GEAR ASS						
37 38	2B 1B		D13-1007		GEAR GEAR ASS	Y					
40	1B		D13-1010-	-14	GEAR						
			D. B. Cone								

E : Europe W : Without Europe P : Canada X : Australia
 K : U.S.A. and Canada M : Without Europe, U.S.A. and Canada

## **PARTS LIST**

× New Parts

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### **MECHANISM ASS'Y (X92-1710-09)**

	Address Ne		Description	Desti- Re-
参照番号	位 置 新		部品名/規格	仕 向 備考
41 42 43 44 45	1B 1B 1B 3A 2B	D13-1011-04 D13-1012-04 D13-1013-43 D13-1015-24 D13-1016-23	GEAR GEAR GEAR GEAR GEAR	
46 48 49 50 53	1B 1A 2B 3B 2A	D14-0601-13 D14-0603-13 D14-0604-04 D14-0605-04 D15-0901-14	PINCH ROLLER ASSY PINCH ROLLER ASSY ROLLER ROLLER PULLEY	
54 55 72	3B 3A 2A	D15-0902-34 D16-0601-04 D21-2018-14	PULLEY BELT SHAFT ASSY	
73	3B	F10-1716-24	SHIELDING PLATE	
80 83 84 85 86	2A 3A 1B 2A 2A	G01-2502-14 G01-2505-24 G01-2506-14 G01-2507-14 G01-2508-24	COMPRESSION SPRING EXTENSION SPRING EXTENSION SPRING TORSION COIL SPRING TORSION COIL SPRING	
87 88 89 91 92	1B 2B 1B 1A 1B	G01-2509-14 G01-2510-24 G01-2511-24 G09-2001-24 G09-2002-24	TORSION COIL SPRING TORSION COIL SPRING EXTENSION SPRING FORMED WIRE FORMED WIRE	
103 105	2B 1 A	J19-4452-03 J19-4417-24	BRACKET HØLDER ASSY	
B C D E F	2A 1A 2B 1A 2B	N39-1770-46 N09-4005-05 N09-4006-15 N09-4061-05 N38-2020-46	PAN HEAD MACHIN SCREW MACHINE SCREW (M2) MACHINE SCREW (M1.7) MACHINE SCREW (M2X 4) PAN HEAD MACHIN SCREW	
G H J K L	3A 1B,2B 2A,2B 2A,3B 1B,2A	N39-2022-46 N35-2003-46 N86-2004-46 N19-2003-04 N19-2023-04	PAN HEAD MACHIN SCREW BINDING HEAD MACHINE SCREW BINDING HEAD TAPTITE SCREW FLAT WASHER FLAT WASHER	
M N P Q S	3B 2A 2B 2A,3A 2A	N19-2005-04 N19-2006-04 N19-2008-04 N19-0373-04 N29-0208-04	FLAT WASHER FLAT WASHER FLAT WASHER FLAT WASHER FLAT WASHER RETAINING RING (3)	
T U W	1B 3A 1A	N29-0205-04 N29-0501-05 N19-1096-04	RETAINING RING (1.5) RETAINING RING FLAT WASHER	
	1 A 2 A	T31-0213-05 T42-0702-25 T42-0704-15	PLAYBACK HEAD DC MOTOR DC MOTOR	

 $\label{eq:continuous} \begin{array}{lll} \textbf{E}: \text{Europe} & \textbf{W}: \text{Without Europe} & \textbf{P}: \text{Canada} & \textbf{X}: \text{Australia} \\ \textbf{K}: \text{U.S.A. and Canada} & \textbf{M}: \text{Without Europe, U.S.A. and Canada} \end{array}$ 

⚠ indicates safety critical components.

# KHC-1054H

# MARKING OF CHIP TRANSISTORS (SMT) (DTAxxxxK, DTCxxxxK, 2SxxxxxK)

SMT (PNP)					
形 名/Parts No.	標 印/Mark	形 名/Parts No.	標 印/Mark		
DTA114EK	<u>16</u>	DTA114YK	<u>54</u>		
DTA124EK	<u>15</u>	DTA143TK	<u>9 3</u>		
DTA114TK	<u>94</u>	DTA114EK	<u>14</u>		
DTA144WK	<u>76</u>	DTA143EK	<u>13</u>		
DTA143XK	<u>3 3</u>	DTA124XK	<u>3 5</u>		
DTA124TK	<u>9 5</u>	DTA144TK	<u>96</u>		
DTA123EK	<u>12</u>	DTA123JK	E32		
DTA143ZK	<u>E13</u>	DTA113JK	<u>E 1 1</u>		
DTA123YK	<u>5 2</u>	DTA114WK	<u>74</u>		
DTA115EK	<u>19</u>	DTA115TK	<u>9 9</u>		
DTA125TK	<u>9 A</u>	DТА114GK	<u>K 1 4</u>		
DTA115GK	<u>K 1 9</u>	DTA124GK	<u>K 1 5</u>		
DTA144GK	<u>K 1 2</u>				

SMT (NPN)					
形 名/Parts No.	標 印/Mark	形 名/Parts No.	標 印/Mark		
DTC144EK	<u>26</u>	DTC114YK	<u>64</u>		
DTC124EK	<u>25</u>	DTC143TK	<u>03</u>		
DTC114TK	<u>04</u>	DTC114EK	<u>24</u>		
DTC144WK	<u>86</u>	DTC143EK	23		
DTC143XK	<u>4 3</u>	DTC124XK	<u>4 5</u>		
DTC124TK	<u>05</u>	DTC144TK	<u>0 6</u>		
DTC123EK	<u>22</u>	DTC123JK	<u>E 4 2</u>		
DTC143ZK	<u>E 2 3</u>	DTC113ZK	<u>E 2 1</u>		
DTC123YK	<u>62</u>	DTC114WK	<u>84</u>		
DTC115EK	<u>29</u>	DTC115TK	09		
DTC125TK	<u>0 A</u>	DTC114GK	<u>K 2 4</u>		
DTC115GK	<u>K 2 9</u>	DTC124GK	<u>K 2 5</u>		
DTC144GK	<u>K 2 2</u>				

SMT					
形 名/Parts No.	略記号 / Mark	形 名/Parts No.	略記号 / Mark		
2 S A 1 0 3 6 K	<u>H</u>	2 S A 1 O 3 7 K	<u>F</u>		
2 S A 1 O 3 7 K L N	<u>D</u>	2 S A 1 4 5 5 K	<u>G</u>		
2 S A 1 5 1 4 K	<u>M</u>	2 S B 8 5 2 K	<u>U</u>		
2 S C 2 O 5 9 K	J	2SC2411K	<u>C</u>		
2 S C 2 4 1 2 K	<u>B</u>	2 S C 2 4 1 2 K L N	<u>L</u>		
2 S C 2 4 1 3 K	<u>A</u>	2SC3082K	<u>s</u>		
2 S C 3 7 2 2 K	<u>I</u>	2 S C 3 8 0 2 K	<u>A L</u>		
2 S C 3 8 3 7 K	<u>A C</u>	2SC3838K	<u>A D</u>		
2SC3839K	<u>A E</u>	2SC3906K	<u>T</u>		
2 S D 1 3 8 3 K	<u>w</u>	2SD1484K	<u>Y</u>		
2SD1757K	<u>A.A</u>	2SD1781K	<u>A F</u>		
2SD1782K	<u>A J</u>				

МРТ			
形 名/Parts No.	略記号 / Mark	形 名/Parts No.	略記号 / Mark
2 S B 1 1 3 2	BA	2 S B 1 1 8 8	ВС
2SB1189	BD	2SD1664	DA
2SD1766	DB	2SD1767	DC
2SD1384	DE		

## KHC-1054H

### **SPECIFICATIONS**

#### FM tuner section

Frequency range	1.1μV/75Ω 3)1.6μV/75Ω
Frequency response (±4.5d8	
Signal to noise ratio (IEC-A) . Selectivity	
	10dB (±400kHz) 10dB (±200kHz : K21 OFF)
	75dB (±200kHz : K21 ON)
Stereo separation (1kHz)	
19kHz carrier leakage	
-	
MW tuner section	
Frequency range	531kHz~1611kHz
Usable sensitivity	
•	
LW tuner section	
Frequency range	153kHz~281kHz
Usable sensitivity	
,	
Cassette deck section	
Tape speed	1.76 cm/ccc

Fast winding time Frequency response(+4dB,	
	30Hz~18kHz (120µs)
	30Hz~20kHz (70µs)
Stereo separation (1kHz)	40dB
Signal to noise ratio (IEC-A)	
	Dolby B.C NR OFF (55dB)
	Dolby B NR ON (65dB)
	Dolby C NR ON (72dB)

#### **Audio section**

Tone action	Bass (70Hz±10dB)
	Mid-bass (200Hz±10dB)
	Treble (10kHz±10dB)
Preout level/impedance	800mV (max)/180Ω

#### General

Operating voltage	14.4V (11~16V allowable)
Current consumption	0.8A at rated power
Dimensions (WxHxD)	188x58x193mm
Installation size	182x52x171mm
Weight	1900g

Note: KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

#### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

### KENWOOD CORPORATION

Alive Mitake, 2-5, 1-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD SERVICE CORPORATION

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745, U.S.A.

550 Clark Drive, Mount Olive, New Jersey 07828, U.S.A.

99-994 Iwaena St. Aiea, Hawaii 96701

KENWOOD ELECTRONICS CANADA INC

6070 Kestrel Road, Mississzuga, Ontario, Canada L5T 158
KENWOOD ELECTRONICS LATIN AMERICA S.A.
P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama, R public de Panama

TRIO-KENWOOD U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts., WD1 8EB United Kingdom

KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker-Str. 15, 63150 Heusenstamm, Germany

TRIO-KENWOOD FRANCE S.A. 13 Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtorl, 7/9 20129 Milano, Italy

KENWOOD ESPAÑA S.A. Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (A.C.N. 001 4 9 074)

P.O. BOX 504, 8 Figtreel Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.

Unit 3712-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong Nr. Horng Kong KENWOOD ELECTRONICS SINGAPORE PTE LTD.

No. 1 Genting Lane #07-00, Singapore, 1334

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